सक्षम

.....सीखो, बढ़ो, सक्षम बनो

***Basic Software Operating Skills***

***Social Citizenship Skills***

***Entrepreneurial & Financial Skills***

***Profile Building & Life Skills***

***Communication & Presentation Skills***

# STUDENT HANDBOOK

## (GRADE 11 - GRADUATION)

PRASH
SOCIAL WELFARE
FOUNDATION

SUPPORTED BY
**SHIV NADAR INSTITUTION OF EMINENCE**
DEEMED TO BE UNIVERSITY

.....सीखो, बढ़ो, सक्षम बनो

# Table of Contents

## Basic Software Operating Skills

## Unit 2.3 MS Power point



## Unit 3: Data Analysis



## Unit 4: Canva



## Unit 5: Artificial Intelligence



## Unit 6: Cybersecurity

## Entrepreneurial and Financial Skills

### Unit 7: Entrepreneurship Development & Basic Fundamentals of Business



### Unit 8: Ecommerce & Digital Marketing



### Unit 9: Financial Literacy & Investment



## Communication and Presentation Skills

### Unit 10: Communication & Public Speaking

## Profile Building and Life Skills

# Social Citizenship Skills

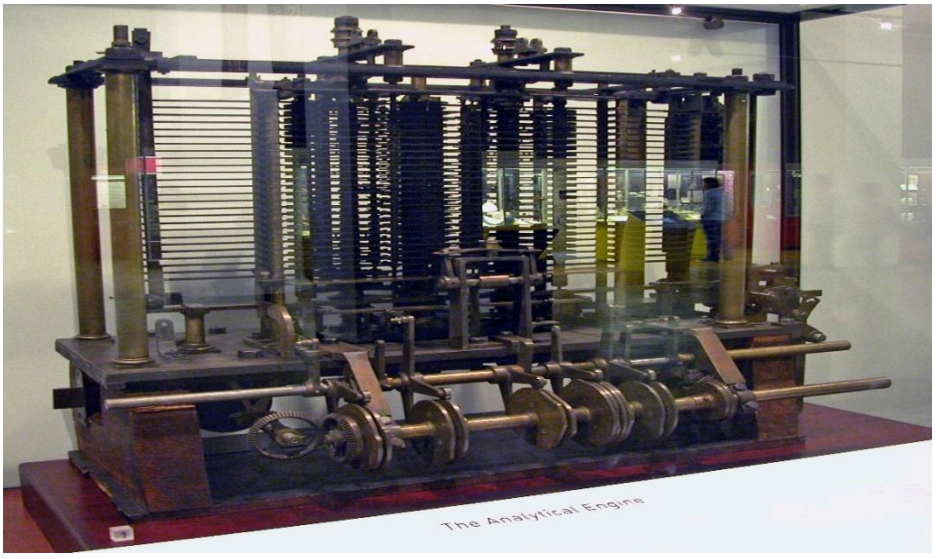
## Unit 16: Civic Engagement & Social Responsibility

# Basic Software Operating Skills

## Unit 1: Computer Fundamentals

### INTRODUCTION

The word “computer” comes from the word “TO COMPUTE” which means to calculate. A computer is normally considered to be a calculation device which can perform the arithmetic operations very speedily.
A computer may be defined as a device which operates upon the data. Data can be in the form of numbers, letters, symbols, size etc. And it comes in various shapes & sizes depending upon the type of computer application.
Charles Babbage is the "Father of the Computer". He was an English mathematician, philosopher, and inventor who designed the first mechanical computer called the Analytical Engine in the 1830s.



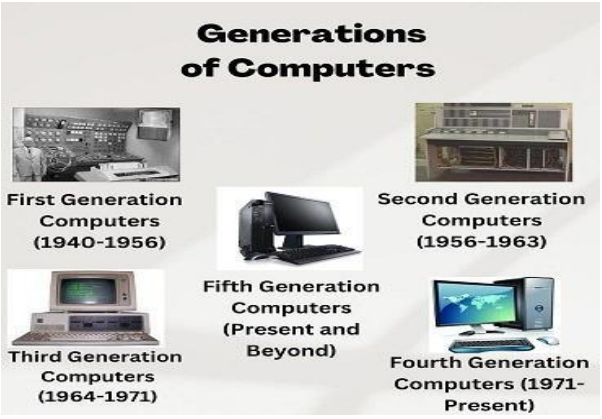

### What is Computer:

A computer is an electronic device which takes input from the user, processes it and gives the output as per user’s requirement.

- A computer first gets the Input, does Process on it and then produces Output.


## Generation of Computer:

The history of computers is divided into five generations based on the technology used. Each generation brought new improvements in size, speed, cost, and functionality.




### 1. First Generation (1940–1956) – Vacuum Tubes:

- These computers used vacuum tubes for processing.
- They were very large and consumed a lot of electricity.
- They were slow and produced a lot of heat.
- Example: ENIAC, UNIVAC

### 2. Second Generation (1956–1963) – Transistors:

- These computers used transistors instead of vacuum tubes.
- They were smaller, faster, and more reliable than first-generation computers.
- They produced less heat and used less power
- Example: IBM 1401, CDC 1604

### 3. Third Generation (1964–1971) – Integrated Circuits (ICs):

- Used small chips called Integrated Circuits.
- Much smaller, cheaper, and faster than second-generation computers.
- Supported multiple applications at the same time.
- Example: IBM 360, PDP-8

### 4. Fourth Generation (1971–Present) – Microprocessors:

- Used microprocessors – a single chip that does all computing work.

- These are modern computers like laptops and desktops.
- They are fast, small, and affordable for everyone.
- Example: Intel 4004, Core i7

### 5.Fifth Generation (Present & Future) – Artificial Intelligence (AI):

- These computers use Artificial Intelligence and machine learning.
- They can understand, think, and make decisions like humans.
- Used in robotics, smart assistants, self-driving cars, and more.
- Example: Siri, Google Assistant, AI Robots

## Characteristics of a computer:

**Some important characteristics of the computer are as follow:**

### 1. Speed:

- A computer works very fast.
- It can perform millions of tasks in a second.
- Example: It can add big numbers within a fraction of a second.

### 2. Accuracy:

- A computer gives correct results.
- Mistakes are usually due to wrong input or instructions given by humans.

### 3. Automation:

- Once you give the instructions (program), the computer works automatically. No need to give instructions again and again.

### 4. Multitasking

- A computer can do many tasks at the same time.
- Example: You can type a document, listen to music, and download files together.

### 5. Storage

- A computer can store a large amount of data.
- You can save text, images, videos, and much more for a long time.

## Types of Computers:

Computers are different types based on their size, power, and usage. Here are the main types:

### 1. Super computer

A supercomputer is a very fast and powerful computer. It can do millions of tasks in one second. Supercomputers are much faster than normal computers.

- Fastest and most powerful computers.
- Used for weather forecasting, space research, scientific simulations.

### 2. Mainframe Computer

A mainframe computer is a large and powerful computer used by big companies and government offices. It can handle many users and large amounts of data at the same time.

- Very big and powerful.
- Can support hundreds or thousands of users at the same time.
- Used by banks, railways, big companies.

## 3. Mini Computer

A minicomputer is a medium-sized computer used by small businesses and organizations. It can handle multiple users at the same time and is used for business tasks and data processing.

- Smaller than mainframe computers but still powerful.
- Used in small companies, organizations, or departments.
- Supports many users but fewer than mainframes.

## 4. Microcomputer (Personal Computer)

A microcomputer is a small, affordable computer used by one person at a time. It is also called a personal computer (PC).


- Commonly used by individuals.
- Also called PC (Personal Computer).
- Used at home, schools, offices.
- Types of Microcomputers:
  - Desktop
  - Laptop
  - Tablet
  - Smartphone

## Role of Computers in Modern Life:

Computers are used in almost every field today. They help us to do work faster, more accurately, and with less effort. Let's look at how computers are used in different areas:

### 1. Education

- Used in schools and colleges for learning and teaching.
- Helps students to study through online classes, videos, and educational software.
- Used for creating question papers and report cards.

### 2. Office Work

- Used for typing documents, emails, and presentations.
- Helps in managing data, records, and communication.
- Saves time and improves efficiency.

### 3. Hospitals and Health Care

- Helps doctors in checking patients and doing surgeries.
- Used for keeping medical records and reports.
- Used in scanning machines (CT scan, MRI).

### 4. Banking

- Used for money transfers, ATM machines, and maintaining customer accounts.
- Helps in online banking and digital payments.

### 5. Business

- Used in billing, inventory, sales reports, and online shopping.
- Helps manage accounts and customer service.

## Parts of computer:

A computer is made up of different parts that work together to perform tasks. These parts are mainly divided into two categories: Hardware and Software.

### 1. Hardware:

Hardware refers to the physical parts of a computer that we can see and touch.

**Examples**: Monitor, Keyboard, Mouse, CPU, Printer, Speakers, Hard Disk,etc.


### 2. Software:

Software refers to the set of instructions or programs that tell the computer what to do. We cannot touch software it only works inside the computer.
Examples: Windows, MS Word, Paint, Google Chrome, Games, etc.

## What is Device in a computer?

A device in a computer refers to any hardware component that helps in input, processing, output, or storage of data. These devices are connected to the computer and work together to complete tasks.

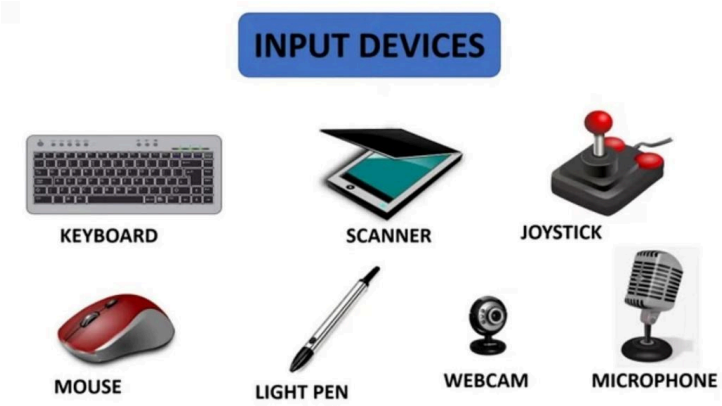
### Types of Devices in Computer:

Computer devices are mainly divided into Three types:

### 1. Input Devices:

These devices are used to enter data and instructions into the computer.
Examples:

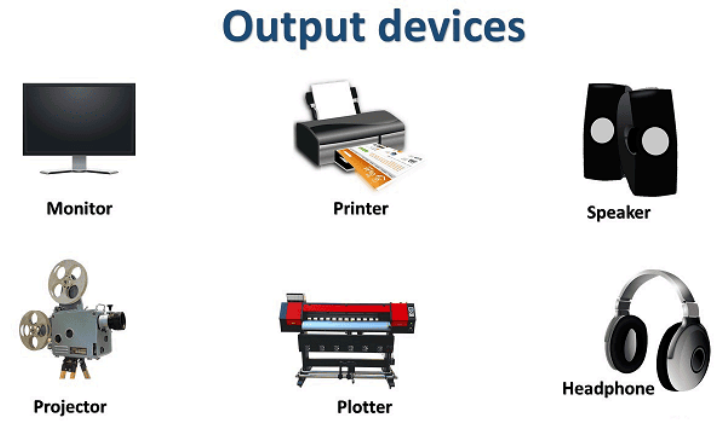
- Keyboard – to type text
- Mouse – to click and move the pointer
- Scanner – to scan documents
- Microphone – to record sound




## 2. Output Devices:

These devices are used to display or show results of processed data.
Examples:

- Monitor – to display text and images
- Printer – to get printed copy (hard copy)
- Speakers – to hear sound
- Projector – to display screen on a wall




## 3. Storage Devices:

Storage devices are hardware used to store data, files, and programs in a computer. These devices help us **save information** permanently or temporarily.


**Examples:**

| Type | Examples | Use |
|---|---|---|
| **Primary Storage** | RAM, Cache | Temporary storage used while computer is on |
| **Secondary Storage** | Hard Disk, SSD | Permanent storage for programs and files |
| **Portable Storage** | PenDrive, CD/DVD | Easy to carry and move data between devices |
| **Cloud Storage** | GoogleDrive, OneDrive | Online storage using internet |

## Primary Memory

Primary memory is the main memory of the computer, also called internal memory.

- It stores data and instructions temporarily while the computer is working.
- It is directly accessible by the CPU.
- It is faster but limited in size compared to secondary storage

## Parts of Primary Memory

- **RAM (Random Access Memory)**
    - Temporary memory (volatile) – data is lost when power is turned off.
    - Used for running programs and processing data.

❖ **Two types:**

- SRAM (Static RAM) – faster, expensive, used in cache.

        - DRAM (Dynamic RAM) – slower, cheaper, used as main memory.

- **ROM (Read Only Memory)**
    - Permanent memory (non-volatile) – data is not lost when power is off.
    - Stores essential programs like BIOS (for booting the computer).
    - **Types:**
        - PROM (Programmable ROM) – can be programmed once.
        - EPROM (Erasable PROM) – can be erased with UV light and reprogrammed.
        - EEPROM (Electrically Erasable PROM) – can be erased and rewritten electrically
- **Cache Memory**
    - Very high-speed memory between CPU and RAM.
    - Stores frequently used instructions for faster processing.
- **Registers**
    - Smallest, fastest memory inside CPU.
    - Stores temporary instructions, addresses, and data.

**Activity:**

- Identify hardware parts & classify them as Input/Output/Storage

**Summary:**

- *A computer is an electronic machine that works on input, process, and output.*
- *Computers developed through five generations, improving in speed, size, and technology.*
- *Main features of computers include speed, accuracy, multitasking, and large storage.*
- *Different types of computers include supercomputers, mainframes, minicomputers, and microcomputers.*
- *Basic components include hardware, software, input/output devices, and different types of memory.*

# Unit 2: MS Office

## Introduction

Microsoft Office (MS Office) is a suite of productivity software developed by Microsoft.
It contains a group of applications that help users create documents, manage data, prepare presentations, send emails, and store information efficiently.

### History of MS Office

- Launched by Microsoft in 1989 for Apple Macintosh and in 1990 for Windows.
- The first version included Word, Excel, and PowerPoint.
- Over time, Microsoft added more programs like Access, Outlook, and OneNote.
- MS Office 2003 introduced a more modern interface and better file sharing.
- MS Office 2007 brought the Ribbon Interface (tab-based tools).
- MS Office 2013 added cloud integration through OneDrive.
- MS Office 2016 and 2019 improved collaboration and sharing features.

## Importance of MS Office

MS Office is one of the most important and widely used computer software suites because it helps users:

- Create professional documents (reports, letters, resumes)
- Analyze data and perform calculations using Excel
- Design creative presentations with PowerPoint
- Send and organize emails with Outlook
- Increase productivity and accuracy in both academic and office work

## Components of MS Office Suite

Each program in MS Office serves a specific purpose:

| Application | Purpose / Use |
|---|---|
| MS Word | Used to create and format text documents like letters, reports, and resumes. |
| MS Excel | Used for data entry, calculations, charts, and analysis through spreadsheets. |
| MS PowerPoint | Used to create slideshows and presentations with text, images, and videos. |

**Summary:**

- *MS Office is a collection of software used for creating documents, presentations, and managing data.*
- *It was first released in 1989–1990 and has improved over time with new features and better interfaces.*
- *MS Office helps users work efficiently by creating documents, analyzing data, and designing presentations.*
- *The main applications include MS Word for documents, MS Excel for spreadsheets, and MS PowerPoint for presentations.*

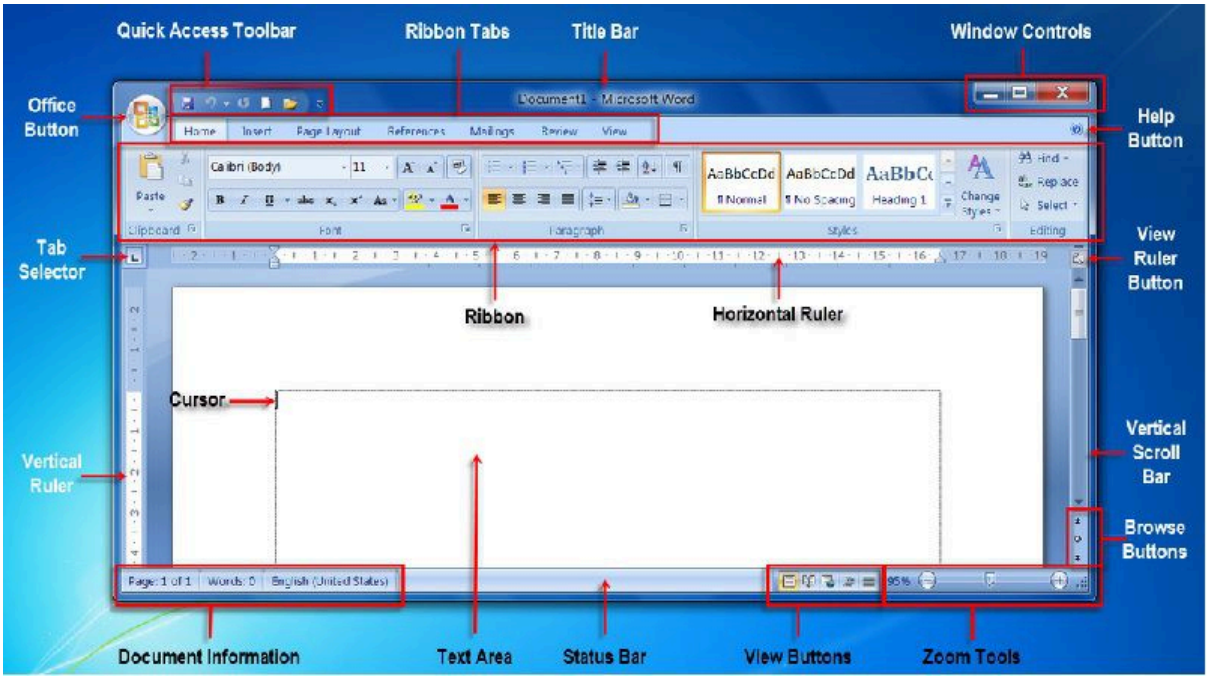
# Unit 2.1: Microsoft Word

## Introduction to MS Word

Microsoft Word is a popular word processing software used worldwide. It is part of the Microsoft Office suite and allows users to create, edit, format, and print documents.

**Key Points:**

- MS Word is used for creating **letters, reports, resumes, essays, projects, and official documents**.
- It helps in organizing content neatly with tools for text formatting, spell check, grammar check, tables, images, charts, and SmartArt.
- Students should learn MS Word because it is widely used in **schools, colleges, and professional work**.
- MS Word provides **templates, styles, themes, and page layout options** to create professional-looking documents easily.
- It saves time and improves document presentation compared to handwriting.



## Advance Formating

**Font Styles:**

- Font style determines the **appearance of the text**. Examples: **Arial, Times New Roman, Calibri etc.**.
- You can highlight text using **Bold, Italic, or Underline**.
- Using clear and readable fonts makes documents professional and easy to read.

**Font Size:**

- Font size determines the **height of the text**.
- Standard font size for body text is **11 or 12 points**.
- Headings are usually **14–16 points**, and subheadings **12–14 points**.

**Tips:**

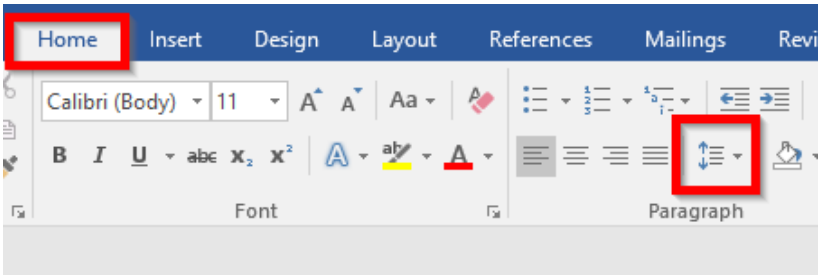
- Avoid using too many font styles in one document to maintain a clean look.
- Consistent fonts make assignments and projects look organized.

**Line Spacing:**

- Line spacing is the space between lines of text.
- Options: **Single, 1.5 lines, Double**.
- Proper line spacing improves **readability** and avoids a crowded appearance.

**Paragraph Spacing:**

- Paragraph spacing is the space before and after a paragraph.
- It makes the document **visually appealing** and easier to read.



**Tips:**

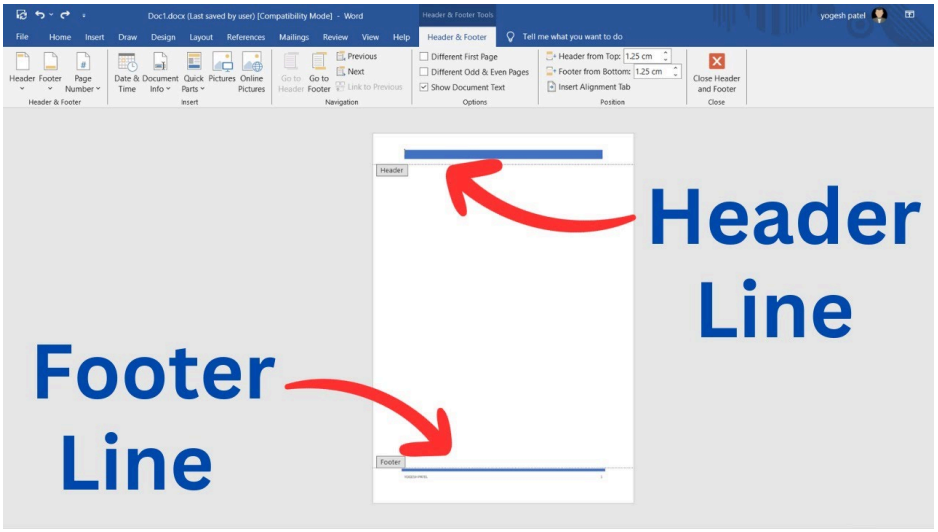
- For official documents, 1.5-line spacing is commonly used.
- Paragraph spacing of 6–12 pt is usually suitable for school or college assignments.

**Header:**

- A section at the **top of the page**. Can include **document title, author name, or date**.

**Footer:**

- A section at the **bottom of the page**. Can include **page numbers or other information**.




**Uses:**

- Helps in **organizing long documents**.
- Automatically adds information to all pages for professional look.

**Tips:**

- You can insert images or logos in headers for official letters.
- Page numbers in footer make long assignments or reports easy to follow.

## Styles and Templates

**Styles:**

- Styles are **predefined formatting sets** like **Heading 1, Heading 2, and Normal**.
- They help maintain **consistent formatting** in headings, subheadings, and body text.

**Templates:**

- Templates are **pre-designed document formats** for resumes, letters, certificates, etc.
- Using templates saves time and ensures professional and neat formatting.

**Points:**

- Students can customize templates to add their own details and design.
- Styles can be modified to suit **personal or institutional formatting rules**.

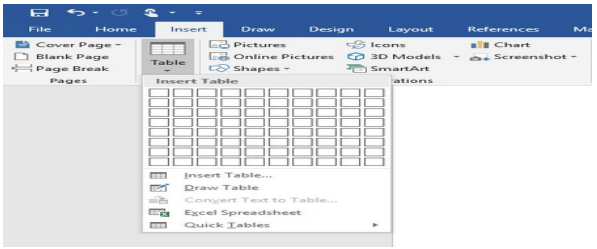
## Creating and Formatting Tables

**Creating Tables:**

- Tables organize data in **rows and columns**.
- Insert → Table → Choose number of rows and columns.

**Formatting Tables:**

- Adjust **borders, shading, alignment, and text direction**.
- Change **column width** and **row height** to fit content.
- Use table styles for a **professional look**.



**Points:**

- Tables are useful for marksheets, schedules, comparison charts, and project data.
- Sorting table data can make it **easier to read**.

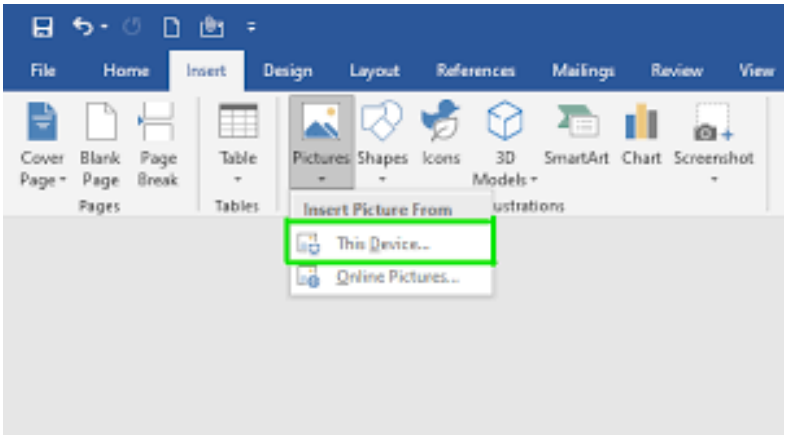
## Inserting and Formatting Images

**Inserting Images:**

- Insert → Pictures → Choose image from computer/choose from online.

**Resizing and Positioning Images:**

- Resize using corner handles (maintains aspect ratio).
- Position using **Wrap Text options** (In Line, Square, Tight, Behind Text).




**Using SmartArt:**

- SmartArt helps in **visual representation** of information.
- Insert → SmartArt → Select diagram type → Enter data.

**Tips:**

- Combining images and SmartArt improves **visual appeal** of projects and presentations.
- Always align images properly with text to maintain **document neatness**.

## Page Setup and Printing Options

**Margins:**

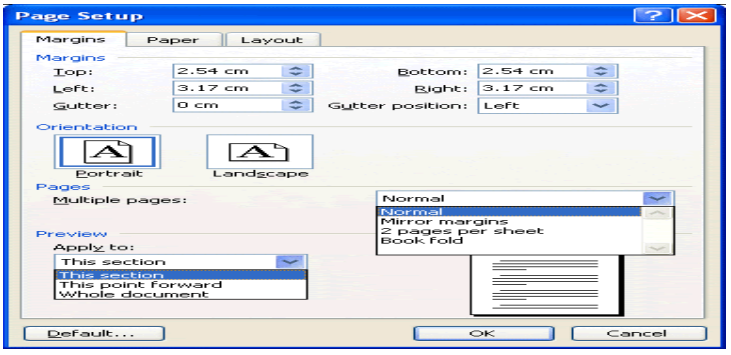
- Margins are the empty spaces around page edges.
- Layout → Margins → Choose Normal / Narrow / Custom.

**Orientation:**

- Portrait (vertical) or Landscape (horizontal).
- Layout → Orientation → Select desired option.

**Paper Size:**

- Standard sizes: A4, Letter, Legal.
- Layout → Size → Choose appropriate paper size.




**Page Numbers:**

- Insert → Page Number → Select location (Top / Bottom).

**Printing Options:**

- File → Print → Select printer, pages, copies, layout.
- Always use **Print Preview** to check document before printing.

**Tips for Students:**

- Always save documents regularly.
- Use **Undo (Ctrl+Z)** and **Redo (Ctrl+Y)** options for easy corrections.
- Learn shortcuts for faster work (e.g., **Ctrl+C, Ctrl+V, Ctrl+B, Ctrl+I**).
- Keep documents organized in **folders** for easy access.

## Activities

- **Apply advanced formatting in a paragraph**
- Create a table of student data and insert a SmartArt diagram.

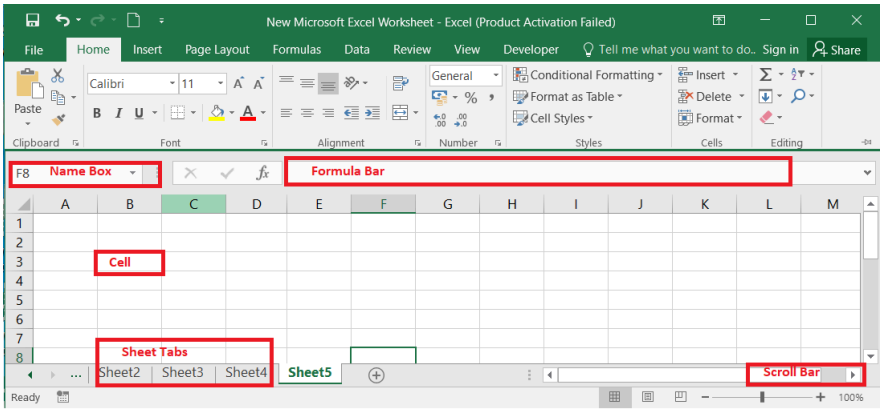
**Summary:**

- *MS Word is a word-processing software used to create, edit, and format documents like letters, reports, and projects.*
- *It provides tools such as font styles, sizes, spacing, headers, footers, tables, images, and SmartArt for better document presentation.*
- *Formatting features help make documents neat and professional through styles, templates, and page layout options.*
- *Users can insert tables, images, and diagrams to organize information clearly.*
- *Page setup, margins, orientation, and printing options help prepare documents correctly for print or submission.*

# Unit 2.2: Microsoft Excel

## Introduction to MS Excel

Microsoft Excel is a powerful spreadsheet software used to **store, organize, and analyze data**. It is part of the Microsoft Office suite and is widely used in schools, colleges, and offices.




**Key Features:**

- Excel allows creating tables, performing calculations, making charts, and visualizing data.
- Students can use Excel to manage **marksheets, budgets, schedules, and projects**.
- It saves time and makes data analysis **easy and accurate**

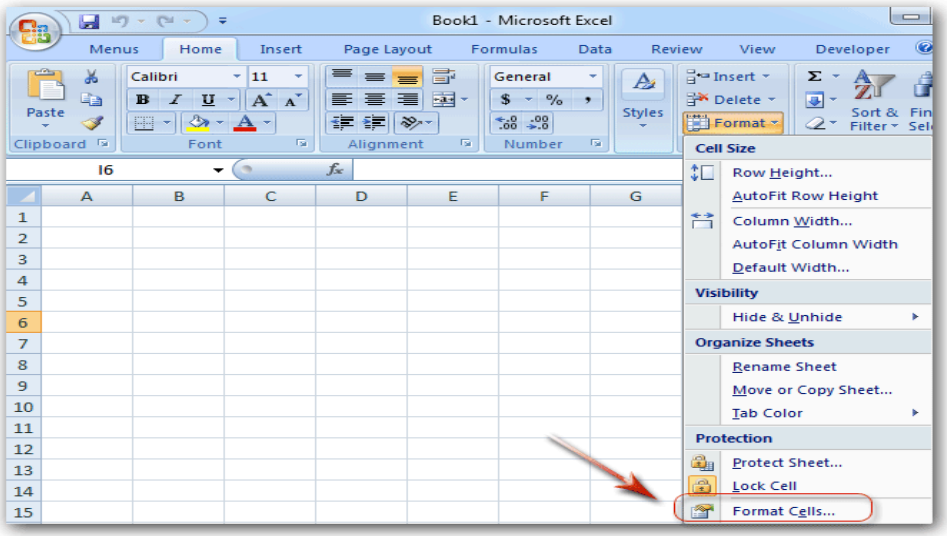
## Entering Data

- Data is entered in **cells**, which are the intersections of rows and columns.
- Each cell has a **unique address** (e.g., A1, B2).
- You can enter **text, numbers, or dates**.
- Press **Enter** to move to the next row and **Tab** to move to the next column.

**Tips:**

- Avoid leaving blank rows/columns in the middle of data.
- Use **Clear All** option to remove unwanted data from cells.

## Formatting Cells

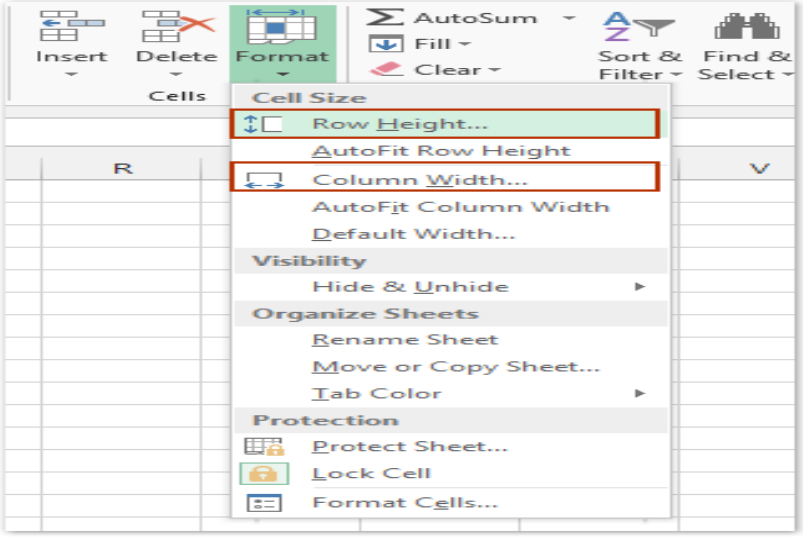



Formatting makes data **clear and attractive**.

**Options include:**

- **Font Style:** Change the type of text (Arial, Calibri, Times New Roman).
- **Font Size & Color:** Make headings larger and important data colored.
- **Borders:** Add borders to separate cells or create tables.
- **Alignment:** Left, Center, Right alignment for text.
- **Number Formatting:** Display numbers as general, currency, percentage, or date.

## Adjusting Row and Column Size




- Row height and column width can be **manually adjusted** or set to **auto-fit** based on content.
- Proper row and column sizing makes the data **neat and readable**.

**Tips:**

- Double-click the boundary between columns to auto-fit content.
- Avoid excessive spacing to keep the sheet compact.

## Tables in Excel

- Tables help organize data in a **structured format**.
- Select data → Insert → Table → Choose style.
- Tables provide **sorting and filtering options** automatically.
- They are useful for managing **large datasets** efficiently.

## Sorting and Filtering Data

**Sorting:**

- Arrange data in **ascending (A–Z or smallest–largest)** or **descending (Z–A or largest–smallest)** order.
- Example: Sort student marks from highest to lowest.

**Filtering:**

- Display only **rows that meet specific criteria**.
- Example: Show only students who scored above 75 marks.

## Using Basic Formula

| **Operation** | **Formula Syntax** | **Example** | **Result** |
|---|---|---|---|
| Addition | =A1 + B1 | =10 + 20 | 30 |
| Subtraction | =A1 - B1 | =50 – 30 | 20 |
| Multiplication | =A1 * B1 | =5 * 4 | 20 |
| Division | =A1 / B1 | =40 / 5 | 8 |
| Combine Numbers and Cells | =A1 + 10 | If A1 = 20, then =A1+10 | 30 |

## How to Use Formulas in Excel

**Steps:**

**Step 1.** Open Excel
**Step2**. Type numbers in two cells

**Example:** 10 in A1, 20 in B1

**Step 3**. Click on another cell (like C1) for result
**Step 4.** Type the formula in cell or in the formula bar

**Example: =A1 + B1**

**Step 5.** Press Enter

**Excel shows the answer: 30**

**Note: Formula Is Always Started with" =" equal sign. (e.g: =A1+A2)**

## Using Basic Function

**Function** allows **automatic calculations** in Excel.

**Common Function :**

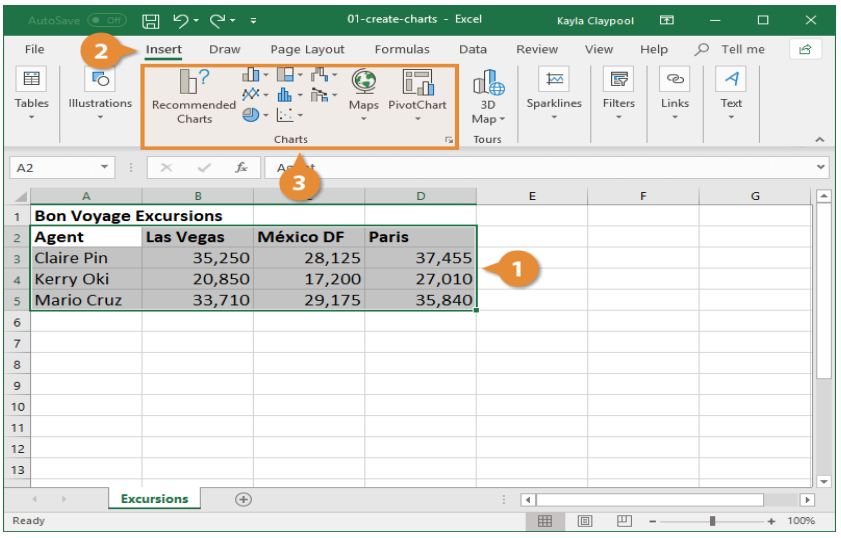
- **SUM:** Adds numbers in selected cells.
  - Example: =SUM(B2:B10)
- **AVERAGE:** Finds the average of numbers.
  - Example: =AVERAGE(B2:B10)
- **IF:** Checks a condition and returns results.
  - Example: =IF(B2>=50,"Pass","Fail")

**Applying Function :**

- Use the **fill handle** (small square at cell corner) to copy formulas to other cells.
- Saves time and ensures consistency across rows or column

# Creating Charts and Graphs in MS Excel

Charts and graphs are tools in Excel that help to visually represent data, making it easier to analyze trends, compare values, and understand patterns. Using charts and graphs is important because a picture of data is often easier to understand than raw numbers.




## 1. Types of Charts and Their Uses

### a) Bar Chart

- Description: Uses horizontal bars to compare different categories.
- Use: Best for comparing different items or categories side by side.
- Example: Compare marks of students in different subjects.

### b) Column Chart

- Description: Uses vertical bars to compare values.
- Use: Suitable for showing data changes over time or between groups.
- Example: Monthly sales of a store over a year.

### c) Line Chart

- Description: Uses points connected by a line to show trends.
- Use: Ideal for showing data trends or changes over time.

- Example: Stock price trends over several months.

**d) Pie Chart**

- Description: Circular chart divided into slices showing percentages.
- Use: Best for showing proportions or percentage distribution of a whole.
- Example: Percentage of students passing, failing, or excelling in a class.

**e) Other Graphs**

- Area Graph: Shows cumulative data over time.
- Scatter Plot: Shows the relationship between two sets of numerical data.
- Combo Graph: Combines two types of charts (e.g., column + line) for complex data.

## 2. Steps to Insert Charts and Graphs

1. **Select the Data:**
    - Highlight the cells containing the data you want to visualize.
    - Include labels for rows and columns for clear chart axes.
2. **Go to Insert → Charts:**
    - Choose the chart type (Bar, Column, Line, Pie, or Other).
    - Excel will create the chart automatically based on the selected data.
3. **Add Titles and Labels:**
    - Give your chart a meaningful title.
    - Label the X-axis (horizontal) and Y-axis (vertical) if needed.
    - Add a legend to explain colors or data series.

4. **Format the Chart:**
    - Change colors, fonts, and gridlines to make the chart clear.
    - Adjust the size and position of the chart in the worksheet.
    - Highlight important data using data labels.

## Using Graphs for Data Visualization

- Graphs help simplify complex data and make it easy to interpret.
- They allow students or professionals to identify trends, compare values, and make decisions quickly.
- Examples of data visualization in Excel:
- Student performance: Compare marks of students using bar or column charts.
- Financial data: Show revenue trends using line charts.
- Market share: Represent market share of products using pie charts.
- Properly formatted charts and graphs improve reports, presentations, and projects.

**Tips for Students:**

- Always include labels, units, and legends for clarity.
- Choose the chart type according to the data: trends → line chart, comparison → bar/column, percentage → pie chart.
- Avoid cluttered charts; simplicity increases readability.

## Activities :

- Enter student data in Excel and apply advanced formatting
- Enter marksheet data with formatting
- Apply formulas on marksheet data
- Generate performance chart from marksheet

**Summary:**

- *Excel is a spreadsheet software used to store, organize, calculate, and analyze data.*
- *Data is entered in cells, and formatting options like fonts, borders, and alignment help make sheets neat and readable.*
- *Users can sort, filter, and organize tables for better data management.*
- *Formulas and functions (SUM, AVERAGE, IF) help perform quick and accurate calculations.*
- *Excel allows creating charts and graphs to visually understand data and trends.*

# UNIT 2.3 : Microsoft PowerPoint

## Introduction

Microsoft PowerPoint is a **presentation software** developed by Microsoft and is a part of the **MS Office**. It is used to create **professional presentations** that can include **text, pictures, charts, graphs, audio, video, and animations**. PowerPoint helps in presenting ideas, reports, or lessons in a **visually attractive and systematic** manner.

A PowerPoint presentation is made up of **slides**, which are like pages in a notebook. Each slide can contain different types of content depending on the topic of the presentation. PowerPoint is widely used in **education, business, research, and training programs** because it helps the audience understand information easily and quickly.

A file created in Microsoft PowerPoint is saved with the **.ppt or .pptx** extension.


.

## Features of Microsoft PowerPoint

Some of the main features of MS PowerPoint are:

- **User-friendly Interface:** PowerPoint has an easy-to-use interface with menus and icons.
- **Attractive Templates and Themes:** Pre-designed templates help users make beautiful slides.
- **Multimedia Support:** You can insert **images, videos, audio clips, and animations** in slides.
- **Transitions and Animations:** Make the presentation lively by adding movement and effects.
- **Slide Master:** Allows uniform design and formatting for all slides.

## Starting Microsoft PowerPoint

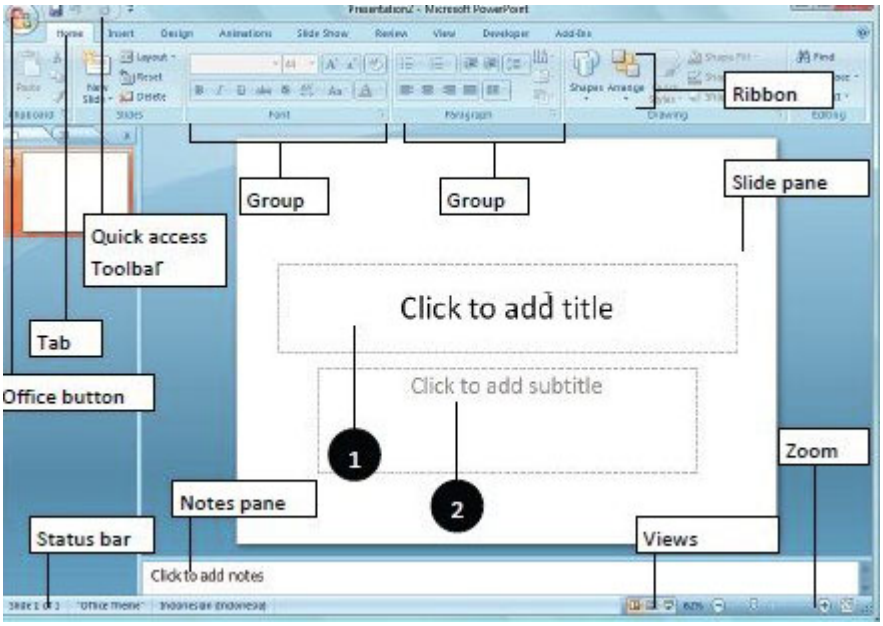
To start PowerPoint:

1. Click on the **Start Menu**.
2. Type **PowerPoint** in the search box.
3. Click on the **Microsoft PowerPoint** icon to open it.

After opening PowerPoint, the **Home Screen** appears where you can:

- Open a **Blank Presentation**, or
- Choose a **pre-designed template**

## The PowerPoint Window Interface




When PowerPoint opens, the screen shows different parts:

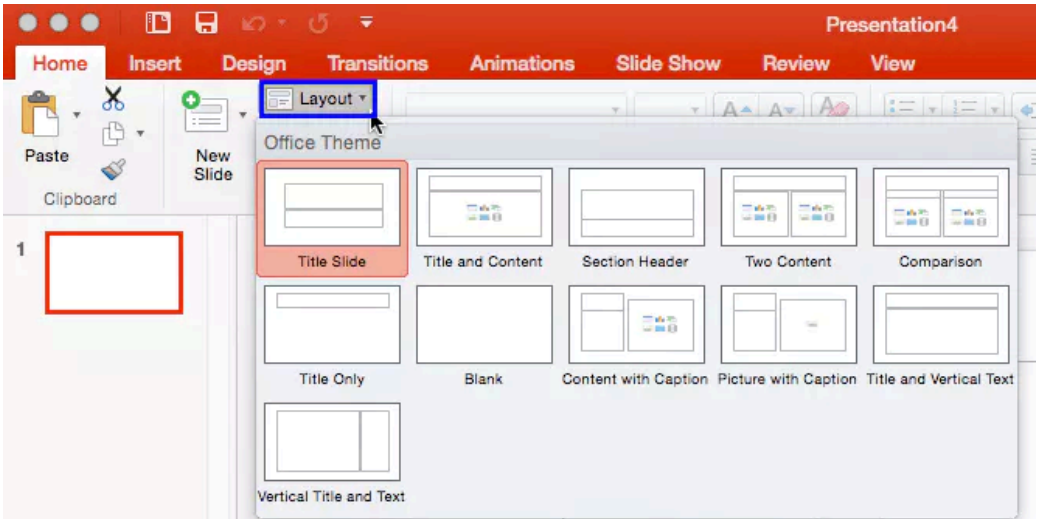
- **Title Bar:** Displays the file name and program name.
- **Ribbon:** Contains tabs (Home, Insert, Design, Transitions, Animations, Slide Show, Review, View). Each tab has different commands grouped together.
- **Slide Pane:** Shows the current slide for editing.
- **Notes Pane:** Allows the presenter to add notes that are visible only during the presentation.
- **Status Bar:** Shows slide number, language, and view options.

## Designing Professional Presentation

Steps to create a new presentation:

1. Open **MS PowerPoint**.
2. Click on **File → New**.
3. Select **Blank Presentation** or choose a ready-made **Template**.
4. Click on **Create**.
5. Add slides using **Home → New Slide**.
6. Enter content such as text, pictures, or charts on each slide.

## Understanding Slide Layouts




A **slide layout** defines how content is arranged on a slide.

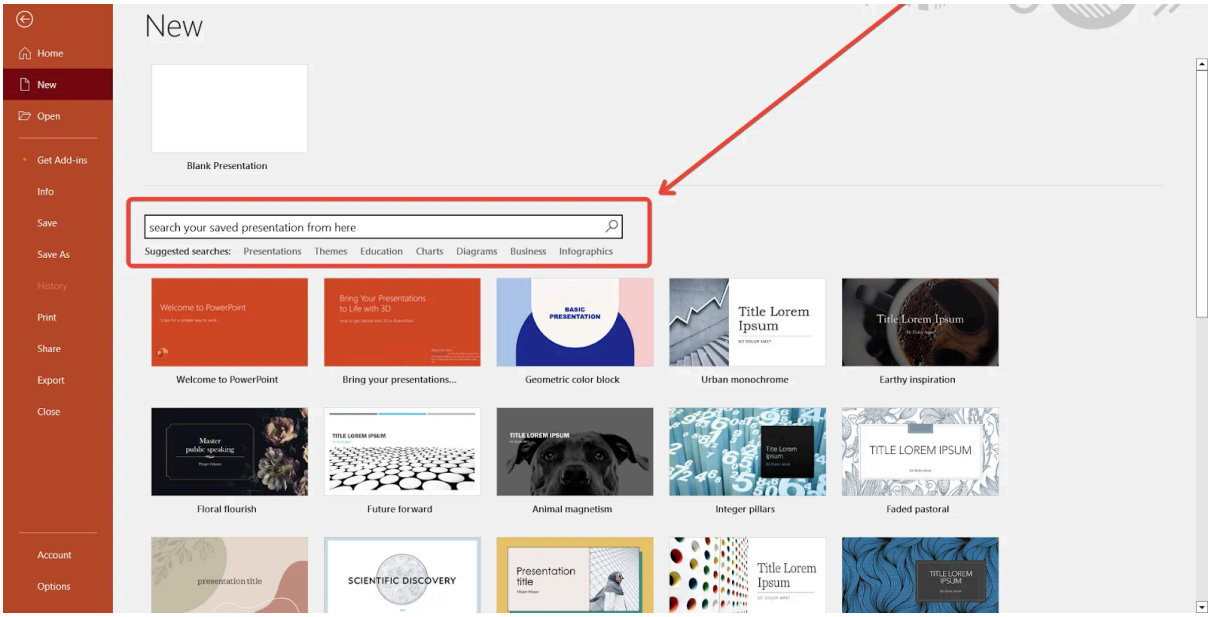
Examples of common layouts:

- **Title Slide:** For title and subtitle.
- **Title and Content:** For headings and related text or images.
- **Two Content:** For comparing two pieces of information side by side.
- **Blank Slide:** For complete freedom to design your own layout.

### You can change the layout anytime:

Go to **Home → Layout → Select Layout Type**.

## Working with Templates




A **template** is a pre-designed slide format that includes colors, fonts, and background styles.

Templates save time and give a professional look to your presentation.

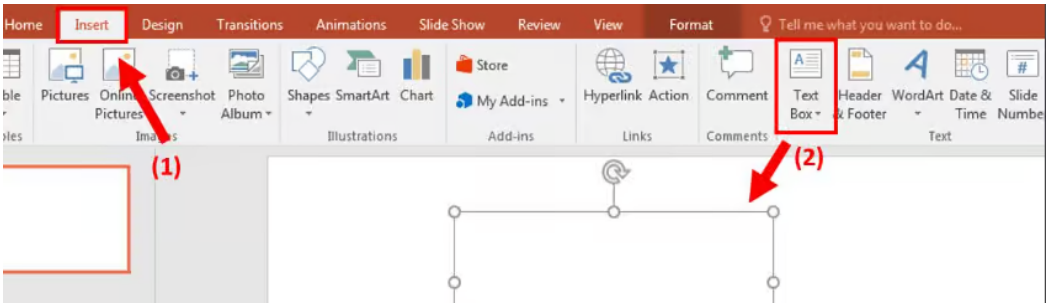
Steps to use a template:

1. Click **File → New**.
2. Choose from **Available Templates and Themes**.
3. Select your desired design and click **Create**.

Templates are ideal for **business presentations, resumes, school projects, and reports**.

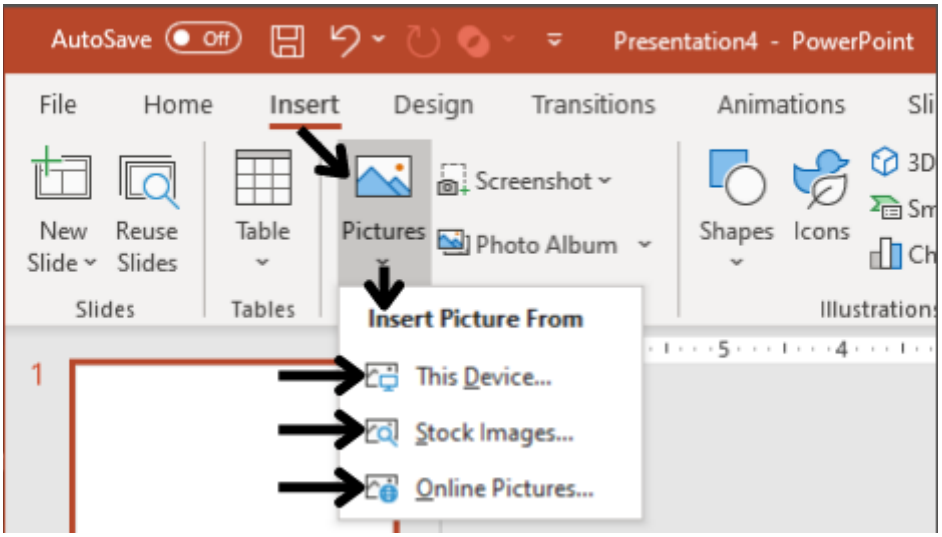
## Inserting Text Box, Pictures, and Shapes

### Inserting Text Box:



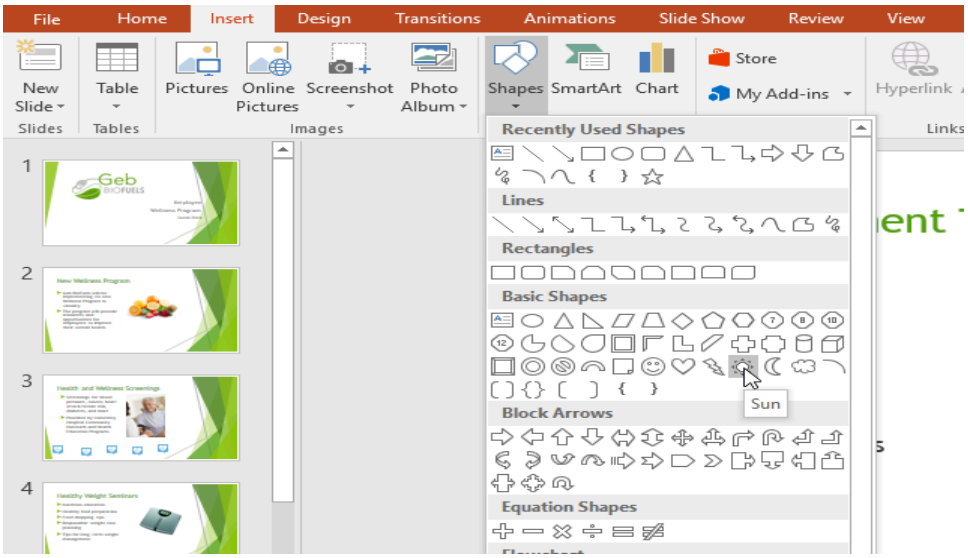

- Click inside a **text box** and type your content.
- You can format the text using the **Home tab**: change font style, size, and color.
- Align the text (left, right, center, justify) as needed.

### Inserting Pictures:



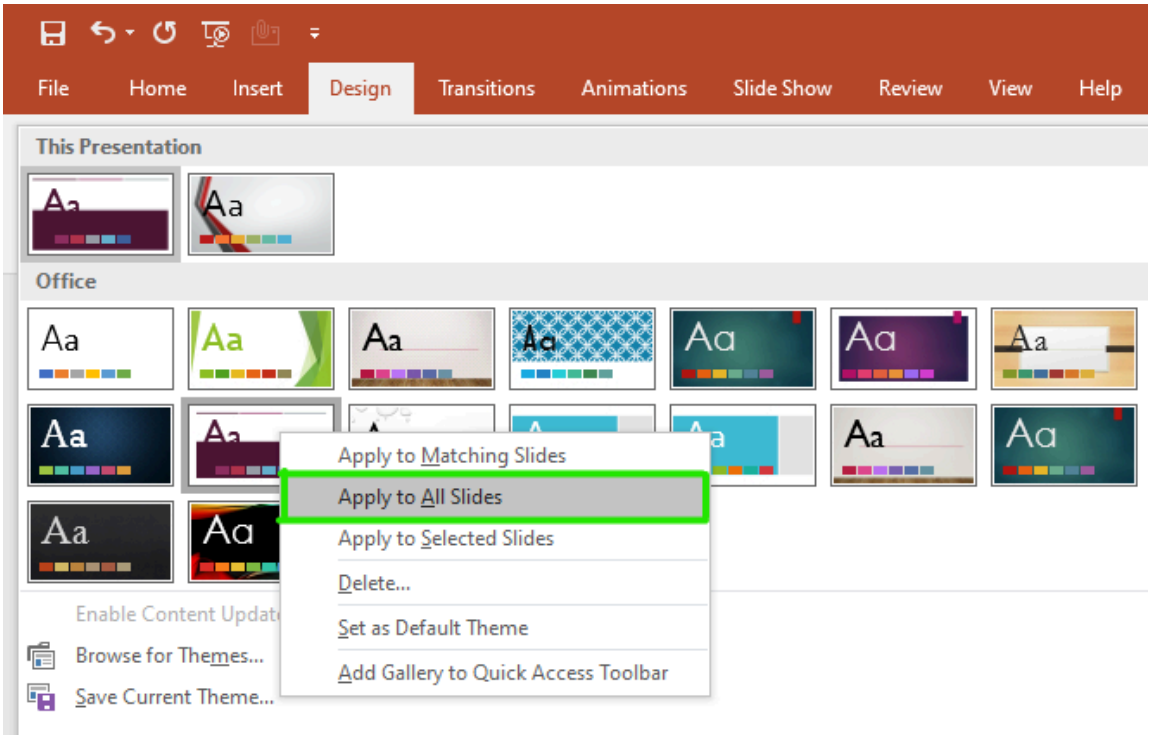

- Go to **Insert → Pictures**.
- Choose an image from your computer or online.
- Resize or reposition the image by dragging its corners.

## Inserting Shapes:




- Go to **Insert → Shapes**.
- Select a shape like a rectangle, arrow, circle, or star.
- Draw the shape on the slide and format it with color or outline.

## Designing Slides



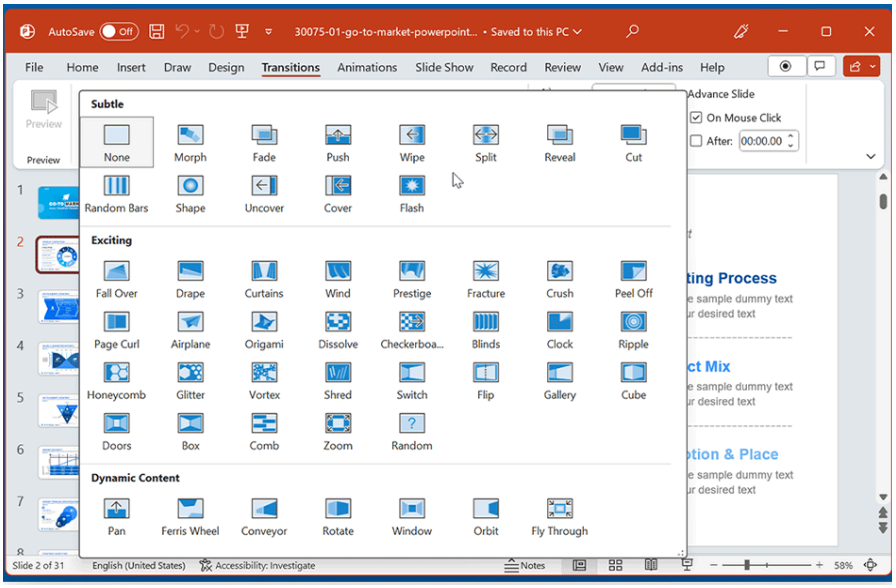
A good design makes the presentation more attractive and easy to understand.

- Go to **Design → Themes** to choose a theme.
- Use **Variants** to adjust color combinations.
- Use **Format Background** to set solid or gradient colors.
- The **Slide Master** feature helps apply the same design to all slides at once.

**Tips for Good Design:**

- Use simple fonts and light backgrounds.
- Avoid too much text on a single slide.
- Use relevant images and graphics.
- Keep colors consistent throughout the presentation.

## Adding Transitions and Animations




**Transitions-** are visual effects applied when moving from one slide to another.

Steps to add transitions:

1. Select the slide.
2. Go to the Transitions **tab**.
3. Choose a transition effect (Fade, Push, Wipe, Split, etc.).

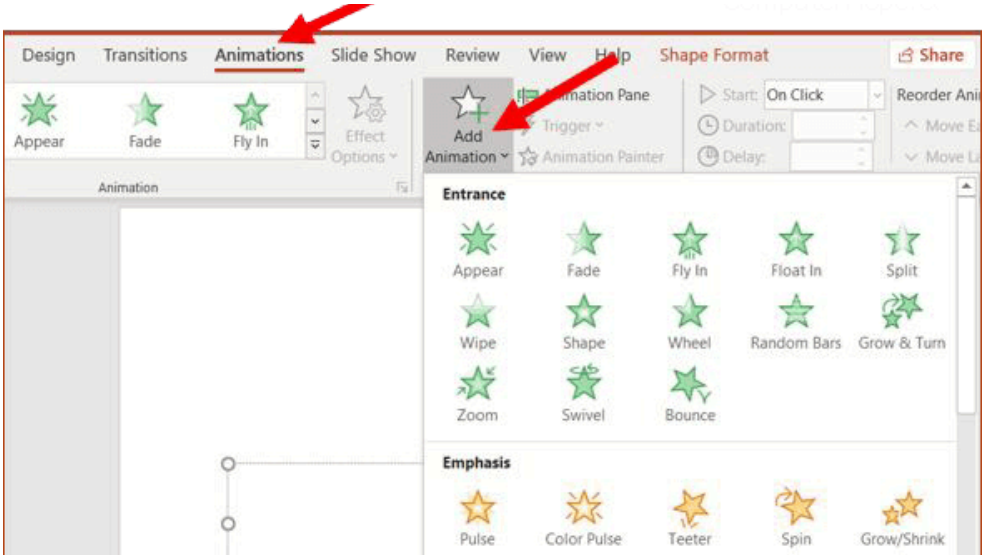
   Click **Apply to All** to use the same transition throughout.

**Animations-** make text or objects appear with motion.

Steps to add animation:

1. Select the object or text.
2. Go to the Animations **tab**.
3. Choose an animation effect (Fly In, Zoom, Appear, etc.).
4. Adjust the timing and order using the Animation **Pane**.

Animations should be used carefully — too many can make a presentation confusing.



## Inserting Charts, Tables, and SmartArt

- **Charts:** Represent data visually using bar, column, line, or pie charts.
    - Go to **Insert → Chart** → select chart type → enter data in Excel sheet.
- **Tables:** Organize information in rows and columns.
    - Go to **Insert → Table** → choose number of rows and columns.
- **SmartArt:** Used to create **diagrams and flowcharts** to show processes, hierarchies, or relationships.
    - Go to **Insert → SmartArt** → choose a diagram and fill text.

## Slide Show and Presentation View

Once all slides are ready, you can display them as a slide show.

Steps to start a slide show:

1. Go to **Slide Show tab → From Beginning** or press **F5**.
2. Use the **arrow keys** to move between slides.
3. Press **Esc** to exit the slide show.

You can also rehearse your presentation using **Rehearse Timings** and record your voice using **Record Slide Show**.

## Saving, Printing, and Sharing a Presentation

- To **Save**:
    - Go to **File → Save As → Choose Location → Enter File Name → Save**.
- To **Print**:
    - Go to **File → Print → Choose Printer → Set Layout → Print**.
- To **Share**:
    - Go to **File → Share → Choose option (Email, OneDrive, or Link)**.

You can also export a presentation as a **PDF or video** file for easy sharing.

## Tips for Creating an Effective Presentation

1. Keep slides **simple and clear**.
2. Use **short sentences and bullet points** instead of paragraphs.
3. Use **images, charts, and diagrams** to make data easy to understand.
4. Choose **contrasting colors** for background and text.
5. Rehearse before presenting to ensure smooth delivery.

**Activity:** Prepare a 5- Slide Presentation on “My Cereer Path”

**Summary:**

- *PowerPoint is a presentation software used to create slides with text, images, audio, video, and animations.*
- *It provides templates, themes, layouts, and design tools to make presentations attractive and professional.*
- *Users can insert text boxes, pictures, shapes, tables, charts, and SmartArt to present information clearly.*
- *Transitions and animations help make slides engaging, while Slide Show mode is used to present the final work.*
- *Presentations can be saved, printed, and shared easily, making PowerPoint useful for studies, business, and projects.*

# UNIT 3: Data Analysis

## Introduction

Data is everywhere — in schools, businesses, and research. **Data** is any information that can be collected, recorded, and analyzed, like numbers, text, dates, or logical values (TRUE/FALSE).

**Data Analysis** is the process of examining and interpreting data to find meaningful insights, trends, and patterns.

A **Dashboard** is a single-screen visual display of key information using charts, graphs, and KPIs. It allows quick understanding of trends and comparisons without reading raw data.

**Importance:**

- Summarizes complex data
- Highlights important metrics
- Enables faster decisions
- Saves time in reporting

## Importing Raw Data

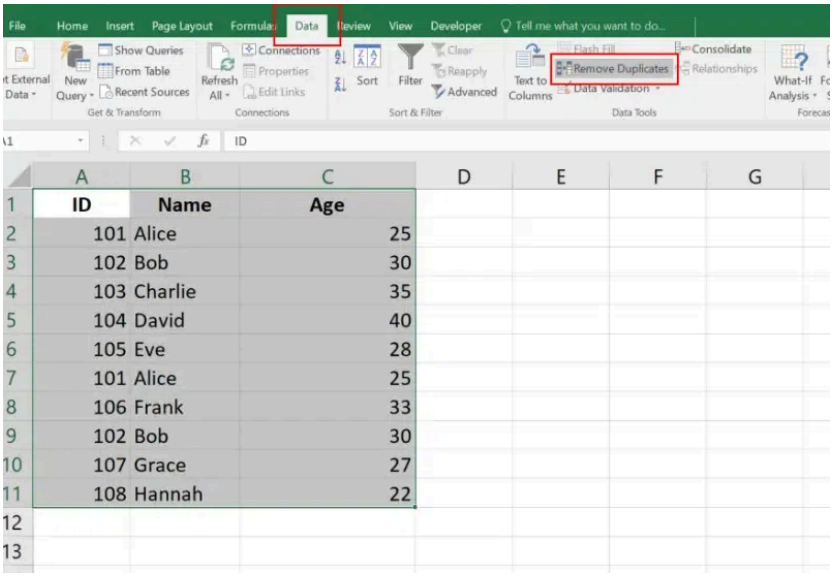
**Steps:**

1. Open Excel.
2. Go to **Data → Get Data → From Text/CSV**.
3. Select your file and preview the data.
4. Check that columns are aligned correctly.
5. Click **Load** to import.

**Tip:** Keep imported data in a separate sheet named **Raw_Data**.

## Cleaning Data

### 1. Remove Duplicates

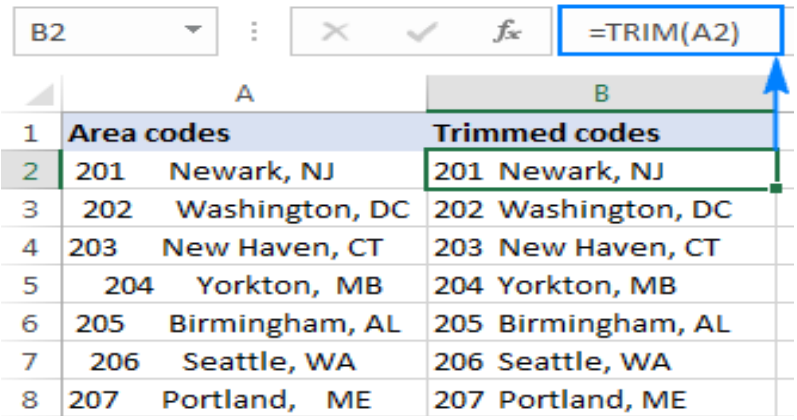



**Purpose:** Avoid repeated rows that can affect analysis.

**Steps:**

1. Select the range of cells containing data.
2. Go to **Data → Remove Duplicates**.
3. In the dialog box, select columns to check.
4. Click **OK**.
5. Excel removes duplicates and shows a message of how many were removed.

## 2. Trim Extra Spaces



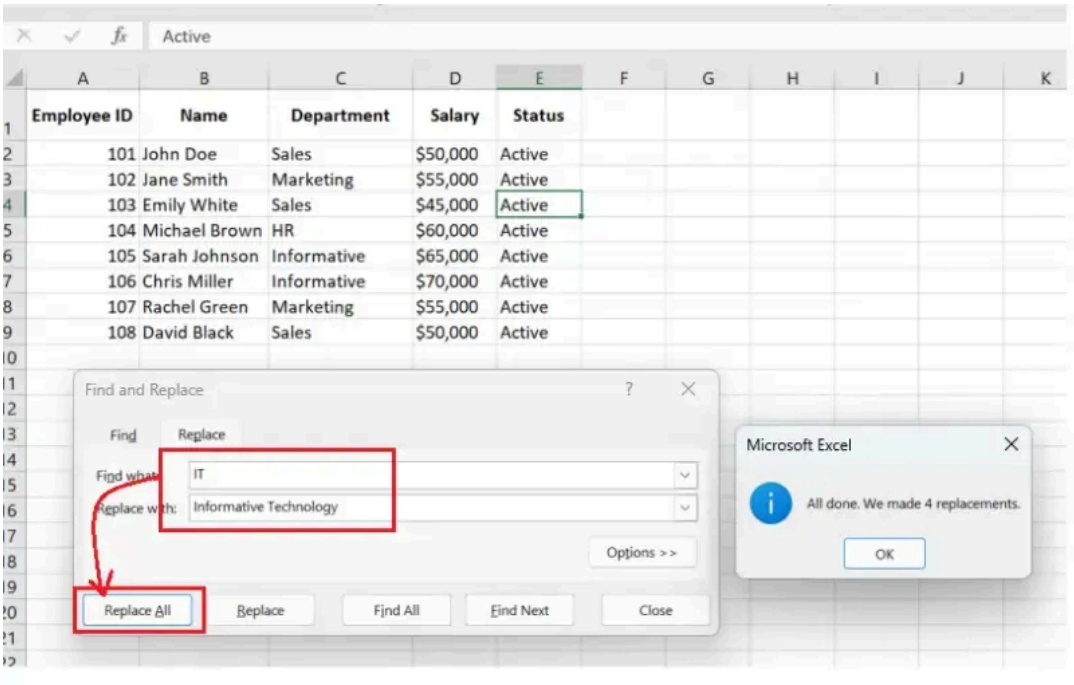

| | A | B |
|---|---|---|
| 1 | Area codes | Trimmed codes |
| 2 | 201 Newark, NJ | 201 Newark, NJ |
| 3 | 202 Washington, DC | 202 Washington, DC |
| 4 | 203 New Haven, CT | 203 New Haven, CT |
| 5 | 204 Yorkton, MB | 204 Yorkton, MB |
| 6 | 205 Birmingham, AL | 205 Birmingham, AL |
| 7 | 206 Seattle, WA | 206 Seattle, WA |
| 8 | 207 Portland, ME | 207 Portland, ME |

**Purpose:** Remove unnecessary spaces that can cause formula or sorting errors.

**Steps:**

1. In a new column, type formula =TRIM(A2) (replace A2 with cell reference).
2. Press **Enter** and copy the formula down for all rows.
3. Copy the new column → Right-click → **Paste Values** to replace original data.

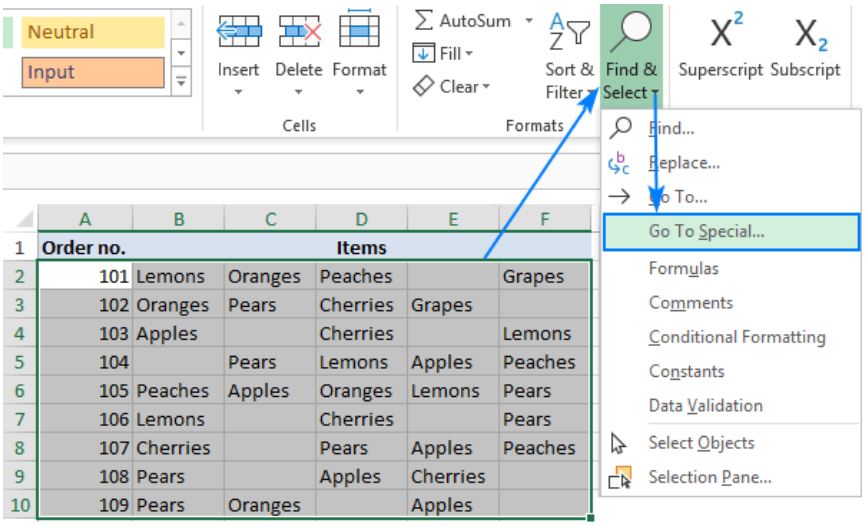
## 3. Find & Replace Errors



**Purpose:** Correct misspelled words or missing values.
**Steps:**

1. Press **Ctrl + H**.
2. In **Find What**, enter the wrong value.
3. In **Replace With**, enter the correct value.
4. Click **Replace All**.

## 4. Handle Blank Cells




**Purpose:** Prevent errors in formulas and charts.
**Steps:**

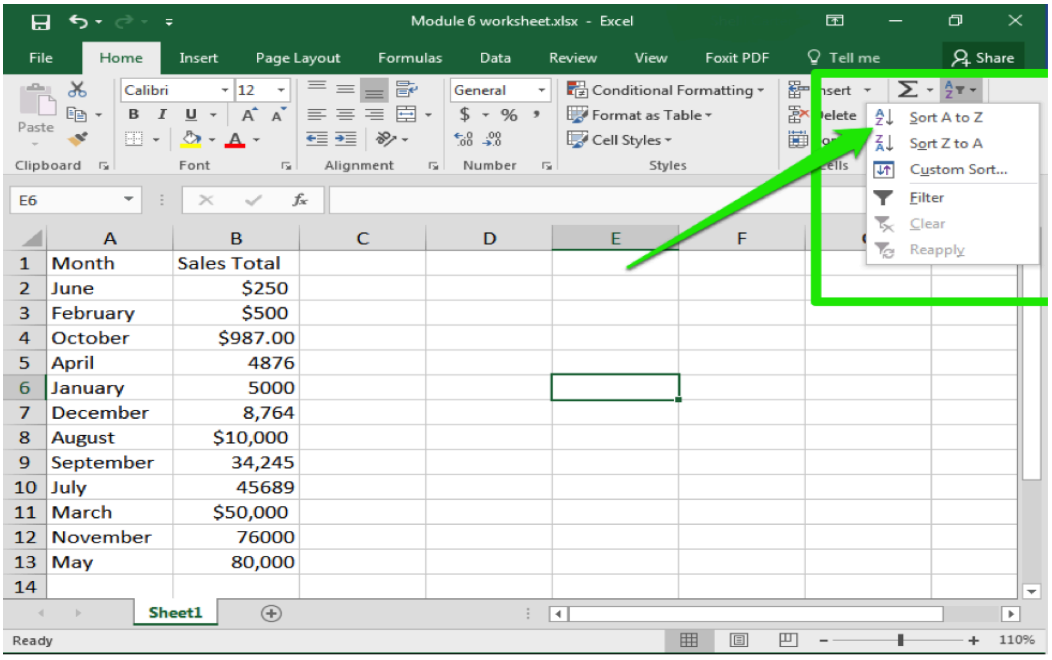
1. Go to **Home → Find & Select → Go To Special → Blanks**.
2. Select all blank cells.
3. Type “N/A” or 0 and press **Ctrl + Enter** to fill all selected blanks.

## 5. Check Data Types

**Purpose:** Ensure numbers, dates, and text are correctly formatted.
**Steps:**

1. Select a column → Right-click → Format Cells.
2. Choose the appropriate type (Number, Date, Text).

## Sorting and Filtering




| | A | B |
|---|---|---|
| 1 | Month | Sales Total |
| 2 | June | $250 |
| 3 | February | $500 |
| 4 | October | $987.00 |
| 5 | April | 4876 |
| 6 | January | 5000 |
| 7 | December | 8,764 |
| 8 | August | $10,000 |
| 9 | September | 34,245 |
| 10 | July | 45689 |
| 11 | March | $50,000 |
| 12 | November | 76000 |
| 13 | May | 80,000 |
| 14 | | |

### Sorting

**Purpose:** Arrange data to identify patterns.
**Steps:**

1. Select data range.
2. Go to **Data → Sort**.
3. Choose column → Ascending/Descending → OK

### Filtering

**Purpose:** Show only relevant rows.
**Steps:**

1. Select header row → **Data → Filter**.
2. Click dropdown → Select criteria

## Understanding Structured Datasets

### Guidelines:

- Each column with clear heading
- Each row represents one record
- Avoid blank rows/merged cells
- Keep formatting consistent

## Dashboard Components

### 1. Data Table

- Cleaned dataset used for calculations and charts

### 2. KPIs (Key Performance Indicators)

**Definition:** Measurable values that indicate performance of a metric or process.

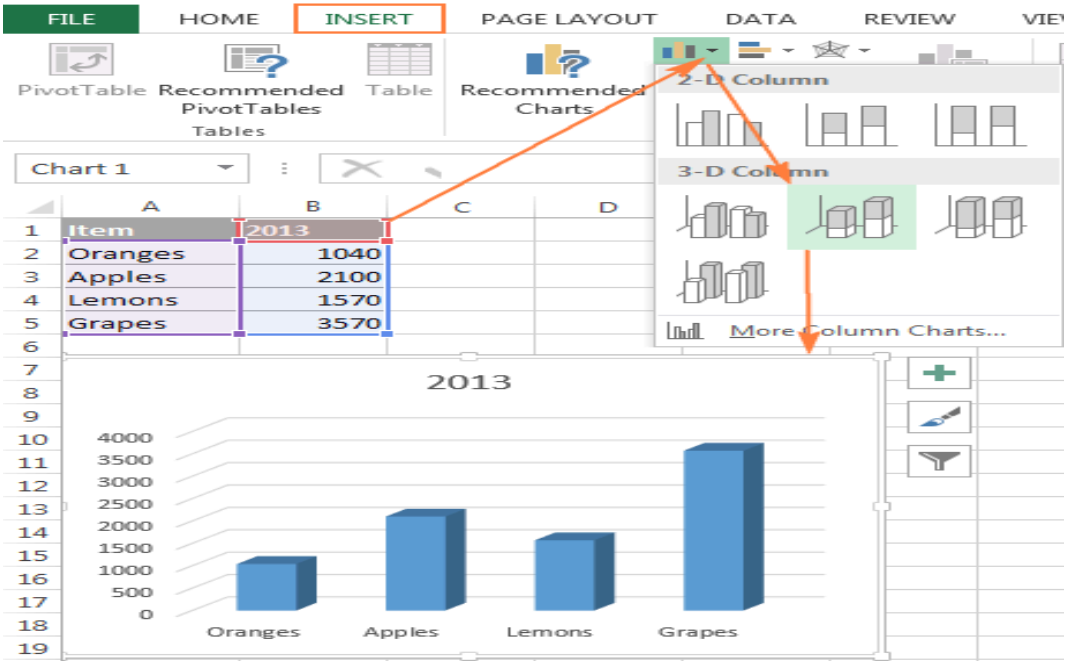
**Purpose:**

- Highlight critical numbers (total, average, max, percentage)
- Quickly show important insights without analyzing full data

**How to use:**

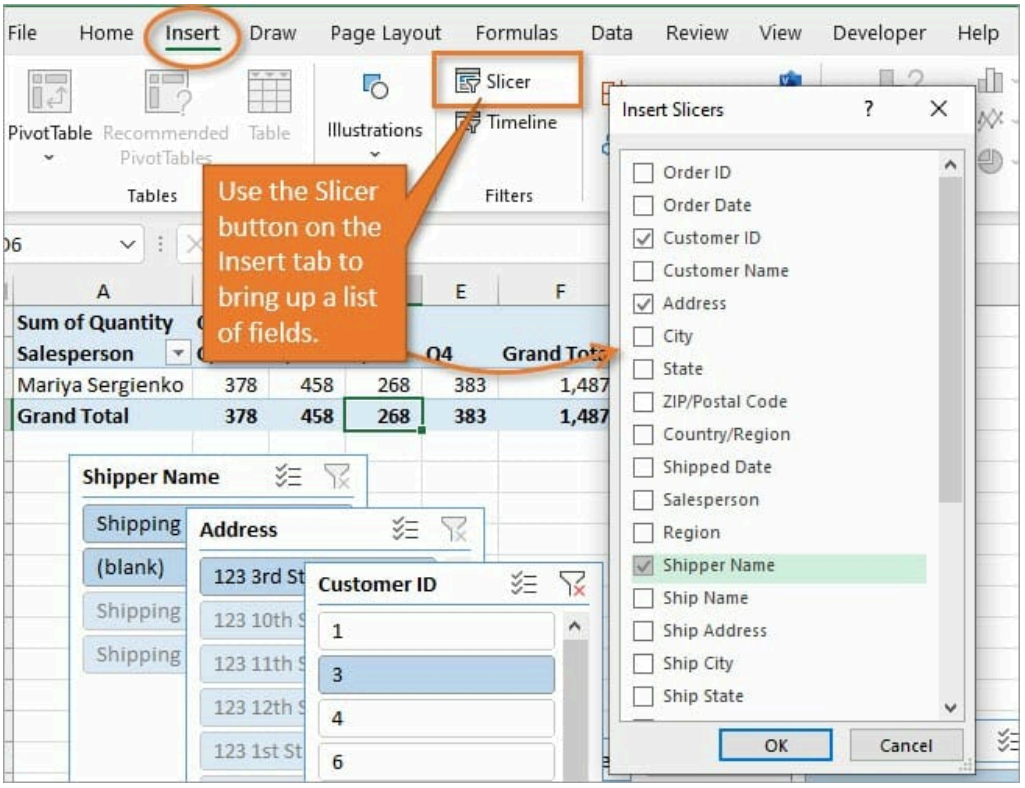
1. Calculate metric using formulas (SUM(), AVERAGE(), MAX())
2. Insert **Text Box** or **Card** to display value
3. Format for visibility; connect to slicers if needed

### 3. Charts & Graphs




- Select data → Insert → Choose chart → Add title and labels

## 4. Slicers




**Purpose:** Interactive filter for tables/charts
**Steps:**

1. Select data table → Insert → Slicer → Choose field
2. Connect slicer to charts for dynamic filtering

## 5. Filters

- Show specific segments of data (Data → Filter → Choose criteria)

## Layout Planning

- Decide KPIs, charts, slicers
- KPIs at top, charts at center, slicers at side
- Maintain spacing, alignment, consistent colors

## Visualization Techniques

- **Bar Chart:** Compare categories horizontally
- **Column Chart:** Compare vertically / show growth
- **Line Chart:** Show trends over time
- **Pie Chart:** Show proportion of whole

## Combining Multiple Charts

When you combine multiple charts in a dashboard, you can understand data from **different perspectives** in one view. It helps in better comparison and decision-making.

**Purpose:**

- To give a **complete story** of data rather than isolated insights.
- Helps viewers connect different metrics like sales, profit, region, and time.

**Tips for Combining Charts:**

1. **Logical Placement:**
   Arrange charts in a meaningful order — for example, show overall sales trend at the top and region-wise details below it.

2. **Consistent Scale:**
   Use similar axis ranges and units (₹, %, etc.) to avoid confusion.

3. **Uniform Formatting:**
   Keep font, colors, and chart styles consistent across all charts for a professional look.

4. **Interactive Linking:**
   Use filters or slicers that control multiple charts at once — so when a user selects a region, all related charts update together.

## Highlighting Key Insights


Highlighting important insights makes your dashboard **action-oriented** and helps users quickly focus on what matters most.

**Purpose:**

- To emphasize trends, targets, or exceptions.
- To make decision-making faster by drawing attention to key metrics.

**Methods to Highlight Key Insights:**

1. **KPIs (Key Performance Indicators):**
   Display top metrics like total sales, growth %, or profit margin using bold text or cards.
2. **Chart Labels & Data Callouts:**
   Show exact values or percentage change directly on charts for clarity.
3. **Conditional Formatting:**
   Apply color logic (e.g., green for positive growth, red for negative) to instantly show performance status.
4. **Use of Shapes or Icons:**
   Add arrows (↑↓) or trend symbols near KPIs to indicate progress or decline.

## Dashboard Design Best Practices

A well-designed dashboard is **clear, interactive, and easy to understand**. Good design helps users make decisions faster and reduces confusion. The goal is not just to display data — it is to **tell a story** through visuals.

### 1. Keep It Simple and Focused

Avoid adding too many charts or colors. A clean layout helps users focus on the key message.

- Show only the most relevant KPIs and charts.
- Use white space to separate sections clearly.
- Avoid clutter — "Less is more."

*Example:* Instead of 10 small charts, show 3–4 that actually explain business performance.

### 2. Maintain Consistency

Consistency makes your dashboard professional and easy to read.

- Use the same **font, colors, and chart styles** throughout.
- Align all elements properly.
- Keep the scale and formatting of numbers uniform.

*Tip:* Use one color theme for the entire dashboard (e.g., blue for positive values, red for negative).

### 3. Highlight Key Metrics

Ensure that important insights are visible at first glance.

- Use bold fonts or larger sizes for KPIs.
- Apply **conditional formatting** to highlight trends.
- Place major KPIs at the top section of the dashboard.

*Example:* Show "Total Sales" and "Profit Margin" in large cards above all charts.

### 4. Ensure Data Accuracy

A visually appealing dashboard is useless if the data is wrong.

- Double-check all formulas and references.
- Update data connections regularly.
- Use protected sheets if multiple users are accessing the dashboard.

*Tip:* Always verify numbers before final presentation.

### 5. Choose the Right Chart Type

Each chart type communicates a different message. Choose based on your goal:

- **Bar / Column Chart:** Compare categories
- **Line Chart:** Show trends over time
- **Pie / Donut Chart:** Show part-to-whole relationship
- **Map Chart:** Display geographic data

*Example:* To show monthly growth, a line chart is more effective than a bar chart.

### 6. Make It Interactive

Interactivity increases engagement and usability.

- Add **Slicers or Drop-down filters** to allow users to explore data.
- Use buttons or navigation links for switching between views.
- Ensure slicers control multiple charts for consistent filtering.

*Example:* User selects “North Region” → all charts instantly update for that region.

### 7. Test Before Sharing

Always test your dashboard before finalizing it.

- Check on different screen sizes (laptop, projector, etc.).
- Verify if charts are readable and slicers work correctly.
- Ask for feedback from others to find improvement areas.

*Tip:* A dashboard is successful only when the user understands it without explanation.

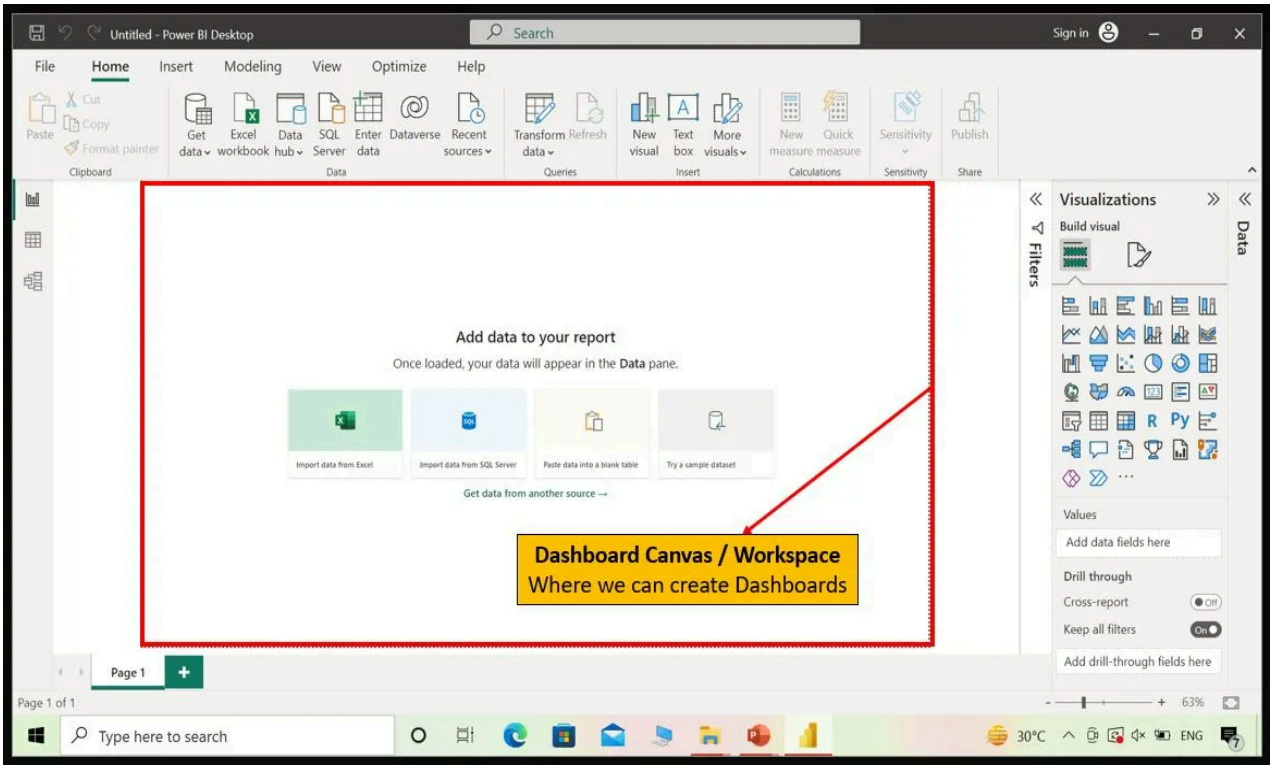
## Basics of Power BI

Power BI is a data visualization and business intelligence tool made by Microsoft.
It helps you turn your Excel or other data into beautiful charts, graphs, and dashboards quickly and easily.

In Short-
Power BI is an advanced version of Excel dashboards that helps you make smart, interactive, and shareable reports using data.

### Power Bi Interface

When you open **Power BI Desktop**, you'll see a simple workspace where you create your reports and dashboards.




### 1. Ribbon

- Located at the top, just like in Excel.
- Contains tabs like Home, Insert, Modeling, View, and Help.
- You use it to import data, add visuals, format charts, or publish reports.

*Example:*
Click Home → Get Data → Excel to bring your Excel file into Power BI.

**2. Report View**

- The large white area in the center of the screen.
- This is where you design your dashboard using charts, visuals, and text.

*Think of it like a blank canvas where you design your report.*

**3. Page Tabs Area**

- The Page Tabs Area is located at the bottom of the Power BI Desktop window.
- It is used to switch between different report pages in your Power BI file.
- Just like Excel has multiple sheets, Power BI can have multiple report pages, and each page can contain different visuals or dashboards.
- You can rename, duplicate, move, or delete report pages from here.

**4. Visualizations Pane**

- Contains all the chart types and visual tools like bar chart, pie chart, card, table, etc.
- You can also format visuals, change colors, and add titles from here.

**5. Data View and Model View**

On the left side, you'll see three small icons:

1. Report View (icon) – where you create visuals.
2. Data View (icon) – to view your data table (like Excel sheet).
3. Model View (icon) – to see relationships between tables.

*Example:* If you imported more than one table (like Sales and Customers), you can connect them here.

**What Power BI Does:**

- Connects with Excel files, databases, or online data
- Helps you clean and organize data
- Creates interactive dashboards and reports
- Lets you share those dashboards with others

**Common Visuals in Power BI:**

- Bar chart
- Pie chart
- Line chart
- Maps
- Cards (for total values)

**Why Use Power BI:**

- Works just like Excel but more powerful
- Dashboards look more professional and interactive
- Updates automatically when your data changes
- Used widely in companies for reports and analysis

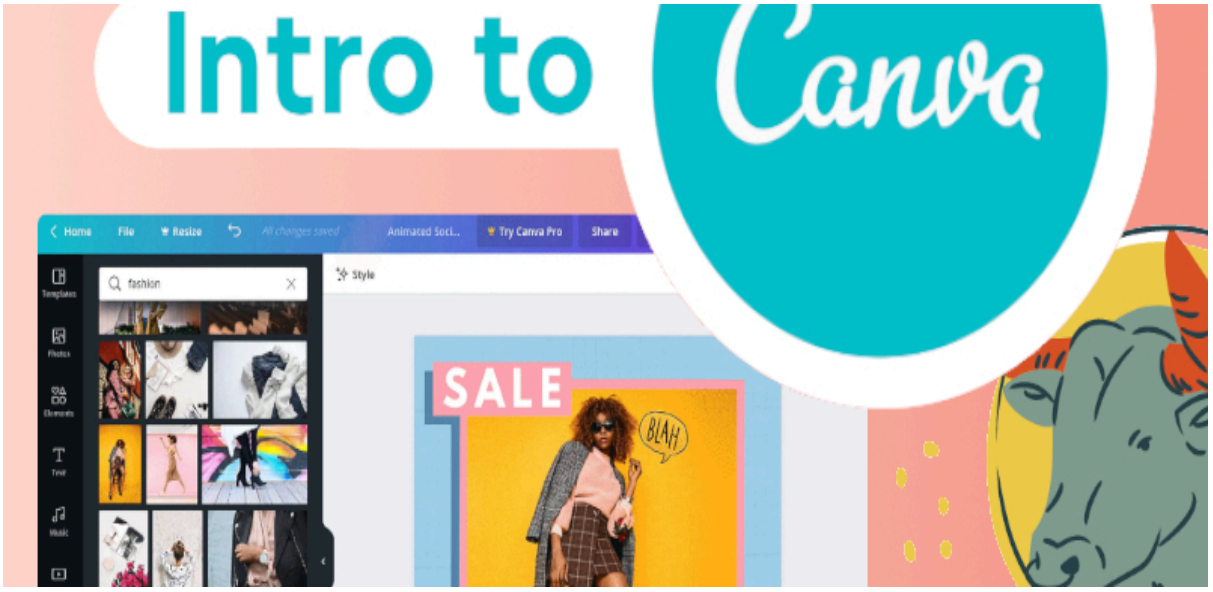
**Activity:** Create Mini Dashboard using Excel Data

**Summary:**

- *Data Analysis helps in understanding information by finding patterns, trends, and insights from raw data.*
- *Excel tools like importing data, cleaning data, sorting, filtering, and organizing datasets make analysis accurate and reliable.*
- *Dashboards summarize key information using KPIs, charts, slicers, and filters for quick decision-making.*
- *Different chart types (bar, column, line, pie) help visualize data clearly and effectively.*
- *Power BI is a powerful tool that creates interactive, professional dashboards and reports for deeper and smarter data analysis.*

# Unit 4: Canva

## Introduction to Canva




In today's digital world, visuals are very important. Posters, infographics, and images help communicate information quickly and effectively.

**Canva** is an online graphic design platform that allows anyone to create **professional-looking designs easily**, without advanced technical skills.

**Why use Canva:**

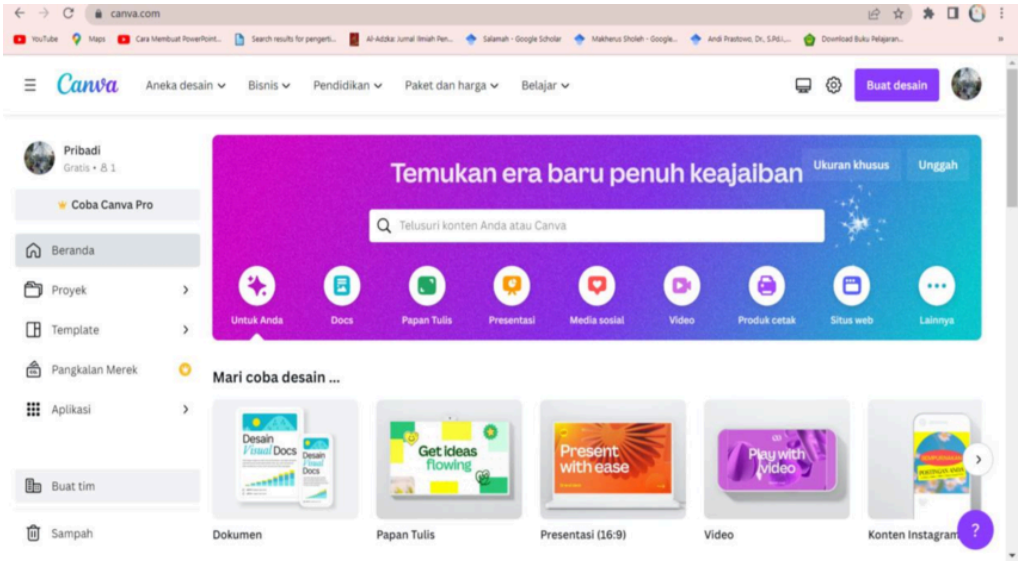
- Easy drag-and-drop interface
- Millions of templates for social media posts, posters, and infographics
- Access to free images, icons, charts, and fonts
- Helps create attractive visuals quickly

## Canva Interface

When you open Canva, you see:

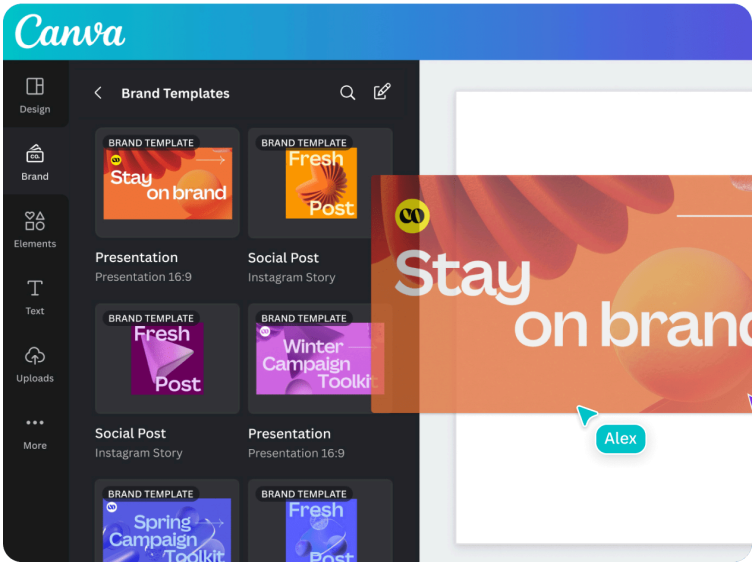
- **Home / Dashboard:** Access your designs, templates, and folders
- **Search Bar:** Quickly find templates or elements
- **Create a Design:** Choose a blank canvas or ready-made template
- **Left Panel:** Tabs for Templates, Elements, Text, Uploads, Photos, Backgrounds
- **Top Panel:** Tools for undo/redo, position, transparency, and alignment

- **Right Panel / Canvas:** Where your design appears and edits are made




## Using Templates

Templates are pre-designed layouts that save time and make designs professional.



**How to use:**

1. Click **Templates** → Search by category (Poster, Infographic)
2. Click on a template to apply it to your canvas
3. Replace text, images, and icons with your own content
4. Adjust colors and layout if needed

**Tip:** Always pick templates suitable for your theme or message.

## Designing Posters & Infographics

Posters and infographics are visual representations of information. They help:

- Catch attention
- Explain ideas simply
- Convey messages clearly

**Steps to create a design:**

1. Choose the purpose (awareness, education, promotion, etc.)
2. Decide key message and content
3. Pick a layout and color scheme

4. Add images, icons, and text
5. Arrange elements neatly for clarity
6. Save or download the final design

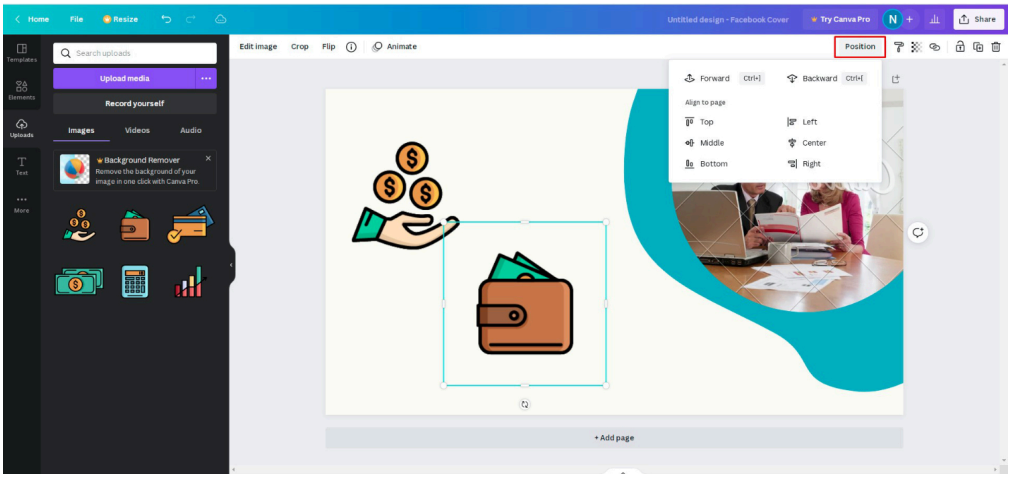
**Tip:** Keep it simple, readable, and visually balanced.

## Adding Images & Icons

Images and icons make your design attractive and informative.

**Steps:**

1. Go to **Elements → Photos / Icons**
2. Search for the image or icon you need
3. Click to insert → Drag to move → Resize as needed
4. Adjust layer order using **Position → Forward / Backward**




**Uploads:** You can also upload your own images (Upload → Upload Media → Select File)

## Text Formatting

Text conveys the message clearly. Canva allows:

- **Headings, Subheadings, Body Text**
- Change **font style, size, color, spacing, and alignment**
- Apply effects like bold, italics, uppercase, or shadow

**Steps to format:**

1. Click on the text box → Select text
2. Use top panel to choose font, size, color, and alignment
3. Adjust spacing using the **Spacing** tool for better readability

**Tip:** Use readable fonts and avoid too many styles in one design.

## Color Schemes & Layouts

Colors and layout create visual impact.

**Tips for effective design:**

- Use 2–3 main colors for consistency
- Ensure contrast between text and background
- Align elements neatly for balance
- Keep margins and spacing uniform

**Steps to apply colors:**

1. Select element or text → Click color option
2. Choose a color from the palette or enter hex code
3. For background, click **Background → Choose color or image**

**Activity:** Design a Poster for an Awareness Campaign

**Summary:**

- *Canva is an easy online tool used to create posters, infographics, and other visual designs.*
- *It provides templates, images, icons, and fonts that help in making professional designs quickly.*
- *Users can customize templates by editing text, colors, images, and layout.*
- *Canva tools allow adding images, icons, and formatted text for clear and attractive visuals.*
- *Good design principles like simple layout, readable fonts, and consistent colors make posters effective.*

# Unit 5: Artificial Intelligence

## Introduction to Artificial Intelligence

Artificial Intelligence, commonly known as AI, is a branch of computer science that focuses on creating machines that can perform tasks requiring human intelligence.
It allows computers to think, learn, and make decisions similar to humans.

In simple words, AI means making machines smart enough to understand, learn, and solve problems on their own.

According to John McCarthy, who is known as the father of AI:

> "Artificial Intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs."

### Examples of AI in Daily Life

- Voice assistants like Siri, Alexa, and Google Assistant.
- Chatbots used on websites for customer service.
- Google Maps showing real-time traffic updates.
- Social Media platforms recommending friends, posts, or reels.

### Goals of AI

The main aim of Artificial Intelligence is to make machines:

- Learn from experiences.
- Adapt to new situations.
- Perform human-like tasks efficiently.

## History and Evolution of Artificial Intelligence

The idea of machines that can think is not new. It has existed for decades, even in ancient stories about mechanical men. However, the real development of AI began in the 20th century with the invention of computers.

Early Developments

- In 1950, British mathematician Alan Turing proposed the concept of intelligent machines and introduced the Turing Test to check if a machine can think like a human.
- In 1956, during the Dartmouth Conference, the term "Artificial Intelligence" was officially used by John McCarthy, marking the birth of AI as a field of study.

Growth of AI Over the Years

| Period | Development |
|---|---|
| 1960s–1970s | Scientists developed early programs that could solve math problems and play games like chess. |
| 1980s | Creation of Expert Systems, capable of making decisions like human specialists. |
| 1990s | AI became more practical with speech recognition and robotics. |
| 2000s | Growth of Machine Learning, where computers learn from data automatically. |
| 2010–Present | AI became a part of everyday life — used in healthcare, education, business, and entertainment. |

Important Scientists in AI

- Alan Turing – Laid the foundation of AI.
- John McCarthy – Coined the term Artificial Intelligence.
- Marvin Minsky – Worked on cognitive simulation.
- Geoffrey Hinton – Known as the "Godfather of Deep Learning."

## Types of Artificial Intelligence

Artificial Intelligence can be divided into two main categories — based on capabilities and based on functionalities.

**Narrow AI (Weak AI):**

- Performs one specific task only.
- Cannot perform tasks outside its training.
- Examples: Voice assistants, email spam filters, Netflix recommendations.

**General AI:**

- Can perform any intellectual task like a human being.
- Can think, reason, and adapt independently.
- Still under development and research.

**Super AI:**

- Hypothetical AI that surpasses human intelligence.
- Can think, reason, and create ideas better than humans.
- Exists only in theory as of now.

## Importance of Artificial Intelligence

AI plays a crucial role in today's modern world. It is helping almost every sector — from education to medicine — to become more efficient and intelligent.

**Automation:**
AI helps in performing repetitive tasks without human help, saving time and effort.

**Data Analysis:**
AI can analyze large amounts of data in seconds and provide valuable insights.

**Decision Making:**
AI helps organizations make faster and more accurate decisions using data and predictions.

**Healthcare:**
Doctors use AI tools to detect diseases and design better treatments.

**Education:**
AI helps in personalized learning, where students get lessons based on their abilities.

**Accessibility:**
AI provides support to differently-abled individuals — for example, speech-to-text and text-to-speech systems.

## Current Applications of Artificial Intelligence

Artificial Intelligence is now a part of almost every modern digital tool. Many AI systems are used today for communication, coding, creativity, and problem-solving.
Here are some of the most popular and latest AI applications being used around the world:

**1. ChatGPT (by OpenAI)**

- A powerful AI chatbot that can understand questions, hold conversations, and generate text, essays, emails, or even computer code.
- It uses Natural Language Processing (NLP) and Machine Learning to respond naturally and intelligently.
- Used by students, teachers, writers, and developers worldwide.

**2. Google Gemini (by Google DeepMind)**

- Gemini is Google's most advanced AI model that can process text, images, audio, and video together.
- It powers Google tools like Bard, Docs, and Search with smarter and faster results.
- Used for creative writing, code generation, and data analysis.

**3. DeepSeek (China-based AI model)**

- A highly efficient open-source AI model known for fast processing and accurate responses.
- Used for data analysis, language translation, and chatbot development.
- Competes with GPT-based models in research and business solutions.

**4. Copilot (by Microsoft & GitHub)**

- An AI assistant that helps programmers write code faster.
- Integrated into Visual Studio and GitHub, it suggests code, fixes errors, and completes programs automatically.
- A great example of AI in software development.

**5. Midjourney (AI Image Generator)**

- An advanced AI tool that creates high-quality images and artworks from text descriptions.
- Artists, designers, and marketers use it for creative projects and digital art generation.
- It uses *Generative AI* to turn imagination into visuals.

## Uses of AI in Day to Day Life

**In Daily Life:**

- Voice assistants like Alexa and Siri.
- Chatbots for online customer service.
- Google Maps for navigation.
- Social media filters and recommendations.

**In Healthcare:**

- AI helps detect diseases through X-rays and reports.
- Virtual nurses and robots assist in surgeries.

**In Education:**

- Smart learning platforms adjust lessons according to student performance.

**In Business:**

- AI predicts customer behavior and helps companies make marketing decisions.

**In Finance:**

- AI is used for fraud detection, credit scoring, and stock market predictions.

**In Transportation:**

- Self-driving cars and AI-based traffic management systems.

## Advantages and Disadvantages of AI

### Advantages of AI

1. Accuracy: AI reduces human errors and provides precise results.
2. 24×7 Availability: Machines don't need rest or breaks.
3. High Speed: AI performs complex calculations within seconds.
4. Works in Risky Environments: AI robots can explore space, mines, or deep oceans.
5. Productivity: AI increases efficiency in industries and businesses.

### Disadvantages of AI

- High Cost: Developing AI systems is expensive.
- Unemployment: Machines can replace human jobs in some areas.
- No Emotions: AI cannot understand human feelings or moral values.
- Over-dependence: Too much reliance on AI can reduce human skills.
- Privacy Issues: Data used for AI systems can be misused or hacked.

- **Activity:** Use AI tools to make formal applications in a structured way.

**Summary:**

- *Artificial Intelligence is the technology that enables machines to learn, think, and make decisions like humans.*
- *It has grown from early ideas in the 1950s to today's advanced tools used in education, business, healthcare, and daily life.*
- *AI is used in voice assistants, chatbots, navigation apps, recommendations, and many modern applications.*
- *There are different types of AI, and each helps in tasks like automation, data analysis, and decision-making.*
- *AI has many advantages such as accuracy and speed, but also challenges like cost, unemployment, and privacy concerns.*

# Unit 6: Cybersecurity

## What is Cybersecurity?

Cybersecurity refers to the practice of defending computers, mobile devices, servers, networks, and data from malicious attacks. These attacks are often carried out by hackers to steal information, damage systems, or gain unauthorized access.

In today's world, where almost every task is done online — from banking to education—cybersecurity has become a necessity. Without it, both individuals and organizations face serious risks like identity theft, financial loss, or misuse of personal data.


**Example:**
If a hacker gains access to your email account, they can misuse your personal conversations, reset your banking passwords, and even scam your contacts. Cybersecurity prevents such situations.

## Importance of Cybersecurity

Cybersecurity is important because it protects the **Confidentiality, Integrity, and Availability (CIA)** of information.

- **Confidentiality** → Ensures that sensitive data (like bank details or passwords) is accessible only to authorized people.
- **Integrity** → Keeps data accurate and prevents unauthorized changes.
- **Availability** → Makes sure information and systems are available whenever needed.

**Real-life Importance:**

- **For Individuals:** Protects personal information like photos, passwords, and online transactions.
- **For Businesses:** Ensures smooth operation of systems, protects customer data, and avoids financial loss.
- **For Nations:** Safeguards defense, government, and critical infrastructure from cyber warfare.

## Safe Browsing Practices

Safe browsing is about using the internet in a secure manner to avoid harmful websites, viruses, or scams. It reduces the chances of falling victim to fraud or downloading malware.

**Safe Browsing Tips:**

1. **Use HTTPS Websites** – Websites starting with *https://* are more secure than *http://*.
2. **Do Not Click Unknown Links** – Fake links in messages or pop-ups may install malware.
3. **Avoid Public Wi-Fi for Banking** – Hackers can easily steal data on open networks.

4. **Keep Browser Updated** – Regular updates fix security loopholes.

5. **Install Antivirus & Firewalls** – These act as protective shields.


**Example:**
If you receive a link saying *"Click here to win a free iPhone"*, it is most likely a phishing trap. Safe browsing helps you identify and avoid such scams.

## Strong Passwords & Two-Factor Authentication (2FA)

A password is like the first lock to your digital accounts. Weak passwords are easy for hackers to crack.

**How to Create a Strong Password:**

- Minimum 8–12 characters
- Mix of uppercase letters, lowercase letters, numbers, and symbols
- Avoid using names, birthdays, or simple sequences like "123456"

**Two-Factor Authentication (2FA):**
2FA adds an extra step of verification. For example, even if someone knows your Gmail password, they cannot log in without the OTP (One-Time Password) sent to your phone.

**Example:**

- Password: *Ravi@2025*
- 2FA: OTP sent on phone/email → makes it almost impossible for hackers to break in.

## Online Safety

**Online Safety** means protecting yourself, your personal data, and your digital content while using the internet.
It includes safe habits, awareness, and responsible use of social media, websites, and online tools.

### Importance of Online Safety

- Protects your personal and financial information
- Prevents cyberbullying, fraud, and identity theft
- Builds responsible digital behavior
- Keeps your devices secure from viruses and malware
- Promotes safe and respectful communication online

### How to Stay Safe Online (General Protection Tips)

**Be Smart. Be Safe.**

- Use **strong passwords** and change them regularly
- Don't share personal information with strangers
- Use **antivirus software** and keep your device updated
- **Think before you click** — avoid suspicious links
- Use **two-factor authentication (2FA)** for extra security
- Keep **backup copies** of important files and photos

## What Should We Share and What Should We Avoid Sharing on the Internet or Social Media?

Sharing information on the internet or social media must be done thoughtfully, because once something is posted online, it can reach thousands of people within seconds. The following guidelines help us understand what is safe and appropriate to share — and what we must avoid.

## What We SHOULD Share

### 1. Positive and Educational Content

We should share information that helps, educates, or inspires others, such as:

- Study notes, facts, or learning material
- Motivational quotes or positive messages
- Useful tips, tutorials, or awareness posts

### 2. Your Skills, Creativity, and Achievements

It is safe and good to share content that represents your talent, such as:

- Art, craft, music, dance, or photography
- Sports achievements, certificates, or school activities
- Personal projects or creative work

## What We SHOULD NOT Share

### 1. Personal Information

Never share private details that can harm your safety, such as:

- Home address, phone number, or school name
- Your daily location or travel plans
- Passwords, OTPs, bank/card details

### 2. Sensitive Photos or Videos

Avoid posting anything that can embarrass you now or in the future, including:

- Personal or family photos in private places
- Images/videos that can be misused or edited
- Anything you would not want teachers or parents to see

## Identifying Phishing, Scam, and Fake News

In today's digital world, it is very important to **identify phishing, scams, and fake news** to stay safe online. These can mislead users, steal personal information, or spread false information.

### 1. Phishing

- **Definition:** Phishing is a fraudulent attempt to obtain sensitive information, like **passwords, credit card numbers, or bank details**, by pretending to be a trustworthy source.

- **Common Signs:**

    - Emails or messages asking for personal information.
    - Suspicious links or attachments.
    - Sense of urgency (e.g., "Your account will be closed!").

- **How to Avoid:**

    - Do not click on unknown links.
    - Verify the sender's email address.
    - Use official websites to login instead of email links.

### 2. Scams

- **Definition:** A scam is a **fraudulent scheme** that tricks people into giving money, personal information, or other resources.

- **Common Types:**

    - Lottery scams ("You have won a prize, send money to claim").
    - Online shopping scams (fake products, fake sellers).
    - Job scams (fake job offers asking for fees).

- **How to Avoid:**

    - Check the authenticity of the source.
    - Do not share personal or financial information.
    - Report suspicious activities.

### 3. Fake News

- **Definition:** Fake news is **false or misleading information presented as news**. It can spread quickly online.

- **Common Signs:**

    - Sensational or shocking headlines.
    - No credible sources cited.
    - Shared on unreliable websites or social media.

- **How to Avoid:**

    - Cross-check information with **reliable sources**.
    - Verify images or videos using fact-check websites.
    - Think critically before sharing information.

**Extra Tips for Students:**

- Always be careful with emails, messages, or social media posts.
- Install antivirus and security software on devices.
- Educate friends and family about phishing, scams, and fake news.

## Cybersecurity Threats: Malware, Ransomware, and Phishing

1. **Malware:**

    - Malicious software designed to damage or spy on systems.
    - Includes viruses, worms, Trojans, spyware, and adware.
    - **Example:** A fake game app secretly steals your data once installed.

2. **Ransomware:**

    - A type of malware that locks your files and demands money (ransom) to unlock them.
    - **Example:** In 2017, the “WannaCry” ransomware attack affected thousands of computers worldwide.

3. **Phishing:**

    - Fake emails, SMS, or calls that trick users into giving away personal or banking details.
    - **Example:** A fake email looking like it is from your bank asking for account details.

**Summary:**

- *Cybersecurity protects computers, networks, and data from hackers, theft, and online threats.*
- *Safe browsing, strong passwords, and two-factor authentication help protect personal information.*
- *Online safety teaches us what to share and what to avoid sharing on the internet or social media.*
- *Cyber threats like phishing, scams, malware, and ransomware can steal data or cause damage, so awareness is important.*
- *Staying updated, thinking before clicking, and following safe online habits keep individuals and organizations secure.*

# Unit 7: Entrepreneurship Development & Basic Fundamentals of Business

## What is Entrepreneurship


Entrepreneurship is the process of starting a new business venture to provide products or services and make a profit. It involves identifying opportunities, developing ideas, organizing resources, and taking risks to create something valuable.

An entrepreneur is a person who takes the initiative to start a new business. Entrepreneurs play a vital role in the economy by generating employment, promoting innovation, and contributing to the nation's development.

**Definition**

> "Entrepreneurship is the dynamic process of creating incremental wealth by individuals who assume the major risks in terms of equity, time, and career."

**Key Characteristics of Entrepreneurship**

1. Innovation: Creating new products, services, or ways of doing business.

2. Risk-taking: Willingness to take calculated risks to achieve success.
3. Vision: Having a clear goal and direction for the business.
4. Decision-making: Making quick and effective business decisions.
5. Leadership: Guiding a team and motivating others toward a common goal.
6. Goal-oriented: Focused on achieving business objectives efficiently.

**Importance of Entrepreneurship**

- Creates job opportunities.
- Promotes innovation and technological progress.
- Encourages economic growth.
- Improves living standards by offering useful products and services.
- Supports regional and national development.

Example

Entrepreneurs like Ratan Tata, Elon Musk, and Falguni Nayar (Nykaa) are examples of individuals who turned innovative ideas into successful businesses.

## Entrepreneurial Mindset

An entrepreneurial mindset means thinking and behaving like an entrepreneur.
It involves creativity, confidence, and the ability to adapt to changing situations.
People with an entrepreneurial mindset see challenges as opportunities rather than obstacles.

**Qualities of an Entrepreneurial Mindset**

1. Creativity: Thinking differently and coming up with new ideas.
2. Risk-taking: Willing to take challenges and calculated risks.
3. Resilience: The strength to overcome failures and keep trying.
4. Self-motivation: Staying focused without external pressure.
5. Adaptability: Adjusting to changes in market or technology.
6. Vision: Having a long-term goal and clear direction.

**How to Develop an Entrepreneurial Mindset**

- Keep learning new things and observing market trends.
- Stay confident and open to feedback.

- Set clear goals and work consistently.
- Network with positive and inspiring people.
- Learn from both success and failure.

Example

Entrepreneurs like Steve Jobs and Jeff Bezos succeeded because of their strong mindset, creativity, and persistence.

## Business Idea Generation & Planning

Every successful business starts with a strong idea.
Business idea generation means discovering opportunities that can be turned into a profitable business.

**Sources of Business Ideas**

1. Personal Experience: Turning hobbies or interests into business (e.g., photography, baking).
2. Market Needs: Identifying problems customers face and providing solutions.
3. Existing Products: Improving current products or adding new features.
4. Observation: Noticing new trends or gaps in the market.
5. Innovation and Technology: Using technology to create new services.

**Steps in Idea Generation**

1. Identify a problem or need.
2. Think of possible solutions.
3. Analyze which idea is most practical and profitable.
4. Conduct market research to check customer demand.
5. Select the best idea to implement.

**Business Planning**

Once the idea is selected, the next step is business planning.
A business plan is a written document that explains how the business will work, grow, and make profit.

Main Components of a Business Plan

- Executive Summary: Overview of the business.
- Business Description: Nature, goal, and mission of the business.

- Market Analysis: Study of customers and competitors.
- Organization Structure: Details about team members and management.
- Product/Service Description: What you are offering and its benefits.
- Marketing Plan: How you will promote and sell the product.
- Financial Plan: Budget, cost, and profit projections.

**Importance of a Business Plan**

- Helps in setting clear goals.
- Guides in decision-making.
- Attracts investors and lenders.
- Helps measure progress.

## Marketing

Marketing is the process of promoting and selling products or services.A good marketing strategy helps startups reach the right customers and build a strong brand.

**Importance of Marketing for Startups**

- Creates brand awareness.
- Builds trust among customers.
- Increases sales and growth.
- Helps startups compete in the market.

**Effective Marketing Strategies**

1. Social Media Marketing:
   Promoting business through platforms like Instagram, Facebook, LinkedIn, or YouTube.
2. Digital Advertising:
   Using paid ads (Google Ads, Facebook Ads) to reach specific audiences.
3. Content Marketing:
   Creating blogs, videos, or infographics to educate and attract customers.
4. Email Marketing:
   Sending promotional or informative emails to customers.
5. Influencer Marketing:
   Partnering with influencers to promote your brand.

6. Referral Programs:
   Giving rewards to customers who refer new clients.
7. Branding:
   Creating a unique logo, tagline, and identity for your business.

Example

Brands like Mamaearth, Zomato, and Boat grew quickly using digital marketing and influencer campaigns.

## Funding Source

Funding means arranging the money required to start and run a business. It is one of the most crucial steps for any startup.

**Types of Funding Sources**

1. Personal Savings:
   Using one's own money to start the business.
2. Family and Friends:
   Borrowing funds from relatives or close friends.
3. Bank Loans:
   Getting business loans or credit from banks.

4. Angel Investors:
   Individuals who invest money in startups in exchange for ownership or equity.
5. Venture Capitalists:
   Investment firms that fund startups with high growth potential.
6. Government Schemes:
   The Government of India supports young entrepreneurs, small businesses, and startups through various schemes. These schemes provide loans, subsidies, training, mentorship, and financial assistance so that students and youth can start or expand their business.

   **Examples:**

**1. Startup India**

- **What it is:** A major initiative by the Government of India to promote innovation and entrepreneurship.
- **Benefits:**
  - Recognized startups get tax benefits, easy compliance, and mentorship support.
  - Access to startup networks, incubators, investors, and training programs.
  - Helps young entrepreneurs convert their ideas into businesses.

**2. Pradhan Mantri MUDRA Yojana (PMMY)**

- **What it is:** A scheme that provides **collateral-free loans** to small and micro businesses.
- **Loan Categories:**
  - **Shishu:** Up to ₹50,000
  - **Kishor:** ₹50,000 to ₹5 lakh
  - **Tarun:** ₹5 lakh to ₹20 lakh
- **Benefits:**
  - Useful for starting small shops, services, tuition centers, workshops, or expanding an existing small business.
  - No heavy paperwork and no need for big security or collateral.

**3. PMEGP (Prime Minister Employment Generation Programme)**

- **What it is:** A credit-linked subsidy scheme that helps new entrepreneurs start micro enterprises.

- **Project Cost Limits:**
  - **Manufacturing sector:** Up to ₹50 lakh
  - **Service sector:** Up to ₹20 lakh
- **Subsidy (Government Contribution):**
  - **General category:**
    - 25% in rural areas
    - 15% in urban areas
  - **Special category (SC/ST/Women/Hill areas):**
    - 35% in rural areas
    - 25% in urban areas

7. Crowdfunding:
   Raising small amounts of money from a large number of people, usually through online platforms.

**Importance of Funding**

- Helps in business setup and product development.
- Supports marketing and expansion.
- Encourages innovation and research.
- Builds investor confidence and credibility.

## Basic of Accounting

Accounting is called the **language of business** because it helps record and understand all the financial activities of an organization.
It shows whether the business is making a profit or facing a loss and helps in planning future growth.

**Objectives of Accounting**

- To record all business transactions in a systematic manner.
- To find out the profit or loss of the business.
- To know the financial position at a particular date.
- To help management make business decisions.
- To provide information to investors, banks, and the government.

**Basic Terms in Accounting**

- **Assets:** Things owned by the business (like cash, building, furniture, machines).
- **Liabilities:** Amounts owed by the business to others (like loans, creditors).
- **Capital:** The money invested by the owner in the business.

- **Revenue (Income):** Money earned from selling goods or services.
- **Expenses:** Costs spent to run the business (like rent, salary, electricity).

## Debit and Credit

In accounting, every transaction has two sides one side is Debit (Dr.) and the other side is Credit (Cr.).
This is based on the Double Entry System of Accounting, which means:

> "For every debit, there is an equal and opposite credit."

**Example:**
If you buy furniture for ₹5,000 in cash —

- Furniture (asset) increases → **Debit Furniture A/c ₹5,000**
- Cash decreases → **Credit Cash A/c ₹5,000**

So both sides are equal — one debit, one credit.

***Component of Accounting***

1. ***Journal:***
   *The first book where all transactions are recorded date-wise.*
2. ***Ledger:***
   *A book where transactions from the journal are grouped under specific accounts (like Cash Account, Sales Account).*
3. ***Trial Balance:***
   *A list of all debit and credit balances to check correctness of entries.*
4. ***Profit & Loss Account:***
   *A statement showing total income, expenses, and profit or loss.*
5. ***Balance Sheet:***
   *A summary showing all assets, liabilities, and capital on a specific date.*

## Importance of Accounting for Entrepreneurs

- Helps in tracking income and expenses.
- Shows profit or loss clearly.
- Useful for financial planning and decision-making.
- Helps when applying for bank loans or government schemes.
- Builds transparency and trust with investors.

## Taxes

Taxes are the mandatory payments that individuals and businesses must give to the government to help it run the country and provide public services such as roads, schools, hospitals, and security.

In simple words

Tax is a part of your income or profit that you pay to the government.

**Purpose of Taxes**

- To generate money for government activities and development.
- To provide public services like healthcare, education, and infrastructure.
- To reduce the gap between rich and poor through fair contribution.
- To control inflation and manage the economy.

**Types of Taxes**

Taxes are mainly divided into two types

**1. Direct Tax**

- Tax paid directly by a person or business to the government.
- It cannot be transferred to anyone else.
- Example: Income Tax, Corporate Tax, Wealth Tax

**Example:**
If you earn ₹5,00,000 a year, you pay income tax on that income directly to the government.

**2. Indirect Tax**

- Tax that is collected by sellers from consumers and later paid to the government.
- It is included in the price of goods and services.
- Example: GST (Goods and Services Tax), Excise Duty, Customs Duty

**Example:**
When you buy a mobile phone for ₹10,000, GST is already added to the price that's an indirect tax.

**Goods and Services Tax (GST)**

**GST** is the most common indirect tax in India today.
It replaced many older taxes like VAT, Service Tax, and Excise Duty.

**Full Form:** Goods and Services Tax

**Key Features of GST:**

- One single tax for the whole country.
- Collected at every stage of production and distribution.
- Makes the tax system simpler and more transparent.

**Types of GST:**

| Type | Collected By | Used For |
|---|---|---|
| **CGST** (Central GST) | Central Government | On sales within the same state |
| **SGST** (State GST) | State Government | On sales within the same state |
| **IGST** (Integrated GST) | Central Government | On sales between different states |

**Importance of Paying Taxes**

- Helps the government build infrastructure and public facilities.
- Supports national defense and safety.
- Encourages economic growth and stability.
- Creates a responsible and law-abiding business environment.

**Activity:** Group Discussion on Entrepreneurship

**Summary:**

- *Entrepreneurship means starting and managing a new business by taking risks, using creativity, and solving problems.*
- *Entrepreneurs need skills like innovation, leadership, decision-making, and a strong entrepreneurial mindset.*
- *A good business idea comes from observing needs, trends, and opportunities, and is developed through proper planning and market research.*
- *Marketing, funding, and a clear business plan help new startups grow, attract customers, and manage finances effectively.*
- *Basic accounting and taxes are essential for running a business responsibly and understanding profit, expenses, assets, and legal requirements.*

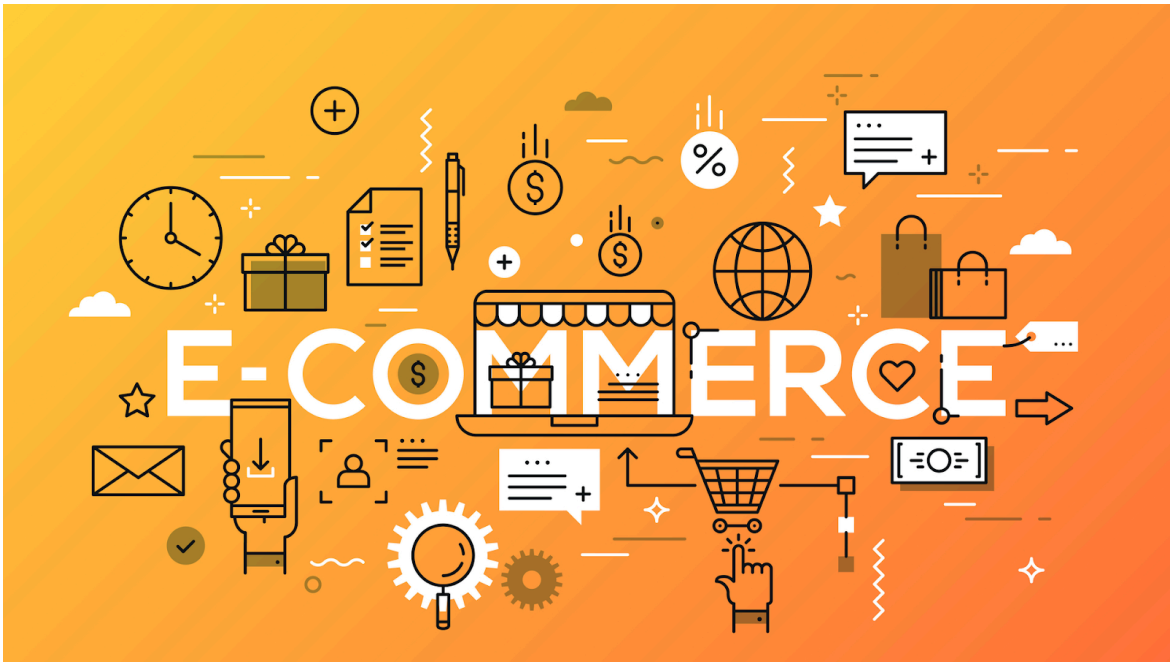
# Unit 8: E-commerce & Digital Marketing

## What is E-Commerce

E-Commerce (Electronic Commerce) refers to the process of buying and selling goods or services over the internet. It includes all business activities that involve an online platform such as websites, apps, or digital marketplaces.

Through E-Commerce, customers can place orders, make payments, and get their products delivered to their doorstep all through digital means.
It connects buyers and sellers globally and removes the need for physical presence.

**Examples:** Amazon, Flipkart, Meesho, Myntra, Blinkit, and JioMart are some popular E-Commerce platforms.




### Features of E-Commerce

- Conducted entirely through digital platforms.
- Operates 24×7, offering convenience to customers.
- Uses secure electronic payment methods.
- Reduces business costs by removing middlemen.
- Reaches a global audience.

### Advantages of E-Commerce

- Time-saving and convenient for both buyer and seller.

- Easy access to a wide range of products.
- Helps small businesses reach global markets.
- Reduces paper and manual work.

**Disadvantages of E-Commerce**

- Risk of online fraud or scams.
- Lack of personal interaction with customers.
- Requires stable internet connectivity.
- Heavy competition among online sellers.

## Traditional Business Trend vs Non-Traditional Business Trend

In the past, business activities were limited to physical stores, manual billing, and face-to-face interactions. This was known as the traditional business trend.
With technological advancements, the non-traditional (modern) business trend emerged, which depends on the internet, online transactions, and digital communication.

The following table shows the clear differences between traditional and non-traditional business trends:

| **Basis of Comparison** | **Traditional Business** | **Non-Traditional (Modern) Business** |
|---|---|---|
| **Nature of Business** | Conducted through physical stores and offices. | Conducted through online websites, mobile apps, and e-platforms. |
| **Customer Reach** | Limited to local or regional markets. | Global reach — customers from anywhere. |
| **Working Hours** | Operates only during fixed business hours. | Operates 24×7, all days of the week. |
| **Communication** | Direct and face-to-face. | Digital — through email, chat, or social media. |
| **Transaction Mode** | Cash or cheque payments. | Digital payments via UPI, cards, or net banking. |

| | | |
|---|---|---|
| **Promotion Methods** | Newspaper, posters, TV, and word-of-mouth. | Online ads, SEO, and social media promotions. |
| **Record Keeping** | Manual records and paper files. | Digital databases and cloud storage. |
| **Operating Cost** | High cost due to rent and staff. | Lower cost due to automation and online systems. |
| **Examples** | Local shops and small traders. | Amazon, Flipkart, Meesho, online startups. |

## Basics of Online Business

An **Online Business** is any business that operates primarily through the internet. It includes selling products or services, handling customers, and making transactions through online platforms.

Starting an online business is easier and cheaper than starting a traditional one. The entrepreneur can work from home or anywhere with an internet connection.

### Steps to Start an Online Business

1. **Select a Business Idea:** Choose what product or service to sell.
2. **Market Research:** Study competitors and customer demand.
3. **Create a Website or Online Store:** Use platforms like Shopify, Amazon, or Meesho.
4. **Register the Business:** Get GST and other legal registrations.
5. **Add Payment Options:** Use secure payment gateways like Razorpay, Paytm, or Google Pay.
6. **Marketing:** Use social media and ads to reach customers.
7. **Customer Support:** Offer fast service through chat, calls, or WhatsApp.

### Benefits of Online Business

- Lower investment cost.
- Access to a global market.
- Flexibility to operate anytime, anywhere.
- Easy to track orders and customer behavior.

## Use of Social Media for Business

Social media has become a key element of modern business. Platforms like Facebook, Instagram, LinkedIn, YouTube, and WhatsApp Business help companies promote their products and communicate directly with customers.

Businesses use social media for advertising, feedback, customer support, and branding. It helps build relationships and increases visibility.

**Example:**
A clothing brand can use Instagram to post pictures of new designs, run ad campaigns, and chat directly with buyers through DMs.

**Benefits of Using Social Media**

- Increases brand awareness.
- Builds trust through direct engagement.
- Easy to share information about products.
- Cost-effective promotion compared to traditional ads.
- Instant customer feedback and interaction.

**Popular Platforms and Their Use:**

| **Platform** | **Use in Business** |
|---|---|
| **Facebook** | Pages, paid ads, and groups for business promotion. |
| **Instagram** | Product display, influencer marketing, reels, and ads. |
| **LinkedIn** | Professional networking and business-to-business marketing. |
| **YouTube** | Video tutorials, product demos, and advertisements. |
| **WhatsApp Business** | Direct messaging, order updates, and quick support. |

## Social Media Marketing

**Social Media Marketing (SMM)** is the process of using social media platforms to promote a business, product, or service. It is an essential part of digital marketing and helps in building brand reputation and customer loyalty.


### Main Activities in Social Media Marketing

1. **Creating and Posting Content:** Regular updates, photos, videos, and stories.
2. **Paid Advertising:** Running targeted ads to specific audiences.
3. **Influencer Collaborations:** Partnering with influencers for promotion.
4. **Customer Interaction:** Responding to comments and messages.
5. **Analyzing Performance:** Tracking engagement, reach, and sales results.

### Advantages of Social Media Marketing

- Low cost compared to traditional advertising.
- Wider audience reach.
- Builds trust through real-time interaction.
- Easy to measure performance through analytics.

- Boosts brand loyalty and visibility.

**Example:**
Brands like **Boat**, **Mamaearth**, and **Lenskart** used social media marketing effectively to connect with young audiences and grow rapidly.

## Online Business Development

Online business development refers to the continuous process of expanding and improving a business's presence on digital platforms. It focuses on improving sales, customer satisfaction, and brand reputation.

### Key Steps in Online Business Development

1. **Market Research:** Understanding target audience and competitors.
2. **Website Optimization:** Ensuring the site is user-friendly and mobile compatible.
3. **SEO (Search Engine Optimization):** Improving visibility on Google and other search engines.
4. **Content Creation:** Regular blogs, videos, and social media updates.
5. **Email Marketing:** Sending offers and newsletters to customers.
6. **Customer Relationship Management (CRM):** Maintaining good relationships through support and communication.
7. **Online Reputation Management:** Handling reviews and feedback positively.

### Importance of Online Business Development

- Increases brand visibility and reach.
- Builds long-term customer trust.
- Enhances competitiveness.
- Leads to sustainable business growth.

**Summary:**

- *E-commerce involves buying and selling products online, offering 24×7 access, global reach, and convenient digital payments.*
- *Modern (non-traditional) business works through websites, apps, and online platforms, unlike traditional physical shops.*
- *Online businesses use websites, marketplaces, and secure payment gateways to sell products or services easily and at low cost.*
- *Social media helps businesses promote products, engage with customers, and build brand awareness through posts, ads, and influencers.*
- *Digital marketing activities like content creation, SEO, ads, and customer communication support online business growth and visibility.*

# Unit 9: Financial Literacy & Investment

## Financial Literacy

Financial Literacy is the knowledge and skills to make informed and effective decisions about money. It includes budgeting, saving, investing, and planning for short-term and long-term goals.


### Importance

- Helps make smart financial decisions
- Prepares for emergencies
- Reduces debt risks
- Builds financial independence
- Encourages responsible spending habits

### Usage in Daily Life

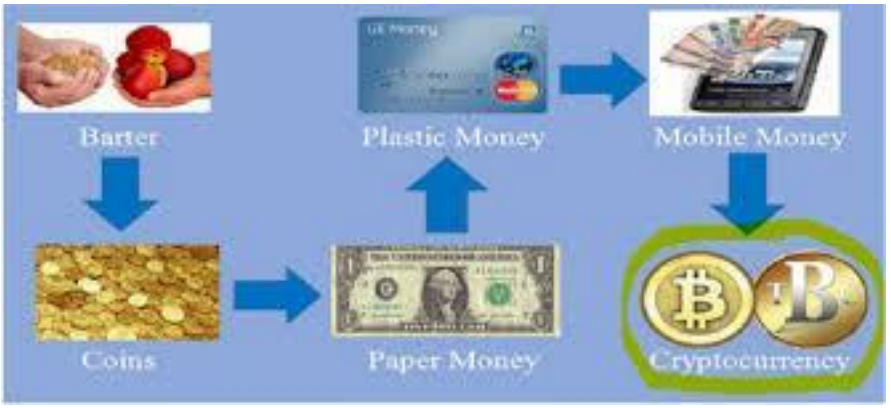
- Planning monthly allowances
- Saving for short-term goals (gadgets, trips)
- Investing in long-term instruments (mutual funds, stocks)
- Comparing prices before purchases

### Example

A student tracks weekly pocket money, saves ₹1,000 for future investment, and spends ₹2,000 responsibly on entertainment and essentials.

## What is Money?

Money is anything people widely accept in exchange for goods and services. It works because everyone trusts its value.




### Key functions:

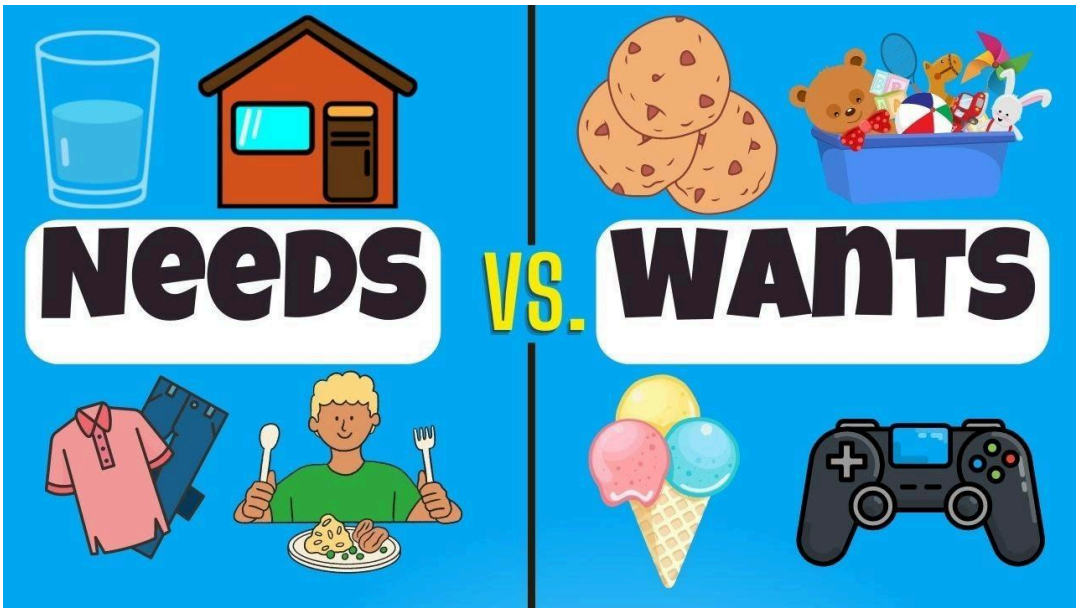
1. **Medium of exchange** – you trade money for things.
2. **Unit of account** – prices are written in rupees, dollars, etc.
3. **Store of value** – you can keep it and use it later.

## Types of Money Today

1. **Cash** – coins & paper notes.
2. **Cards** – **Debit card** (spend your bank balance), **Credit card** (borrow up to a limit).
3. **Digital Payments** – UPI apps (Ponape, G Pay), mobile wallets (Paytm), net-banking, QR codes, NFC tap-to-pay, even cryptocurrencies.

## Needs vs Wants

- **Needs** = must-haves for survival or basic well-being (food, water, shelter, basic clothes, medicine, school fees).
- **Wants** = nice-to-haves that make life fun or stylish (gaming console, branded shoes, fancy vacation).




**Rule of thumb:** Cover needs first, then decide how much of your leftover money can go to wants.

## What is a Budget?

A budget is a written plan that shows the estimated income and planned spending over a specific period of time (Such as month , Quarterly).


1. See exactly where your money goes.
2. Avoid overspending.
3. Save for goals (new laptop, college, emergency fund).
4. Prepare for surprises

## Example – Student Budget Chart

### Pocket Money = ₹1000

| Items | How Much (₹) |
|---|---|
| Food & Snacks | 300 |
| Transport | 150 |
| Mobile Recharge | 100 |
| School Supplies | 200 |
| Entertainment (movies,games) | 100 |
| Savings | 150 |
| Total | ₹1000 |

### Simple 50-30-20 Budget Rule for students

- 50 % Needs
- 30 % Wants
- 20 % Savings & Investments

## What is Expense?

An **expense** is the **money you spend** to buy goods or services. **Money you pay** for something like food, clothes, school fees, travel, etc.

## Types of Expenses:

| Type | Example |
|---|---|
| **Essential (Needs)** | Food, rent, medicine, school fees |
| **Non-essential (Wants)** | Movies, video games, snacks outside |

## Tracking of Expenses?

Tracking expenses means **writing down every time you spend money** — so you can see where your money is going.

### Example Table:

| Date | What You Bought | Amount Spent |
|---|---|---|
| 1 Aug | Snacks | ₹50 |
| 2 Aug | Bus Fare | ₹20 |
| 3 Aug | Stationery | ₹100 |

**Total Spending :170**

## What is a Bank?

A bank is a financial institution that helps people save money, borrow money, and manage their finances. It acts as a safe place to deposit money and provides various financial services like loans, credit cards, and online payments.

### Banking Products & Services

Banking products are tools provided by banks to manage money safely, make transactions, and earn interest.

### Types of Bank Accounts & Services

| Product/Service | Use | Example |
|---|---|---|
| **Savings Account** | Safe money storage + earn interest | Saving money for future needs or emergency funds |
| **Current Account** | Frequent transactions for business | Daily transactions for a shop or online seller |
| **Fixed Deposit (FD)** | Locked funds earn higher interest | Investing ₹20,000 for 1 year to earn higher returns |
| **Recurring Deposit (RD)** | Save small amounts monthly | Depositing ₹1,000 every month for 1 year to build savings |
| **Debit/Credit Cards** | Cashless transactions | Paying for groceries, fuel, or online shopping |
| **Loans** | Borrow money for education, personal or business | Education loan for higher studies or a bike loan |

## Tips for Using Bank Services

- Always check minimum balance requirements
- Set alerts for debit/credit transactions
- Use net banking for secure transfers

## Investments: Mutual Funds, Stock Market & Cryptocurrencies

### Investment Definition:

Investment means putting money in assets to earn returns over time.

## Mutual Funds

**Definition:** Pool of money from many investors managed by professionals and invested in stocks, bonds, or other instruments.


**Types:**

- **Equity Funds:** Invest mostly in stocks
- **Debt Funds:** Invest in bonds and fixed-income securities
- **Hybrid Funds:** Combination of equity and debt

**Advantages:**

- Reduces risk through diversification
- Professionally managed
- Small investors can participate

**Disadvantages:**

- Subject to market risk
- Management fees may reduce returns

**Example:** A student invests ₹5,000 in a balanced mutual fund for 3 years.

## Stock Market:

**Definition:** Platform to buy/sell shares of publicly listed companies.

**Importance:**

- Grow wealth through dividends and capital gains
- Learn about business and economics


**Pros:** High returns, ownership in companies
**Cons:** High risk, requires research and monitoring

**Example:** A student buys 10 shares of a tech company, monitors prices, and calculates gains.

## Cryptocurrencies:

**Definition:** Digital currencies using cryptography for security; not regulated by central banks.

**Pros:** Potential high returns, decentralized
**Cons:** Highly volatile, limited acceptance


**Example:** A student invests ₹2,000 in Bitcoin to learn market behavior.

### Risk vs Return Table

| Investment Type | Risk | Return |
|---|---|---|
| Fixed Deposit | Low | Low |
| Mutual Fund | Moderate | Moderate |
| Stock Market | High | High |
| Cryptocurrency | Very High | Very High |

## Long-Term Wealth Building

Creating financial stability and growth through consistent saving and investing over time.

### Importance:

- Financial independence
- Prepare for life goals (education, home, retirement)
- Reduce reliance on loans

### Ways to Build Wealth:

1. Save early and regularly
2. Invest in mutual funds, stocks, retirement schemes
3. Reinvest returns for compounding benefits
4. Maintain an emergency fund

**Example:** A student invests ₹500 monthly in mutual funds and RD from age 16 to build a corpus by age 25.

**Summary:**

- *Financial literacy helps in making smart decisions about earning, saving, spending, and investing money.*
- *Understanding needs vs wants, budgeting, and tracking expenses helps manage money wisely.*
- *Banks provide essential services like savings accounts, FDs, RDs, cards, and loans to keep money safe and support financial plans.*
- *Investments such as mutual funds, stocks, and cryptocurrencies offer ways to grow wealth but come with different levels of risk and return.*
- *Long-term wealth building requires regular saving, smart investing, and planning for future goals.*

# Communication and Presentation Skills

## Unit 10: Communication & Public Speaking

### Introduction


In today's world, communication plays a vital role in every field — whether it is education, business, or employment.
Good communication skills help us express our ideas clearly, understand others effectively, and build strong relationships.

When we enter the professional world, it becomes important to **communicate confidently and respectfully**, whether through speaking, writing, or even body language.
This unit will help students learn about verbal and non-verbal communication, writing an effective resume, and developing interview and group discussion skills.

### Verbal Communication

**Verbal communication** means expressing thoughts and ideas using **spoken or written words**.
It is the most common form of communication used in day-to-day life.

## Types of Verbal Communication

1. **Oral Communication:**
   Includes face-to-face conversations, meetings, presentations, group discussions, and telephone calls.

    - Example: Talking to a teacher, giving a speech, or answering questions in an interview.

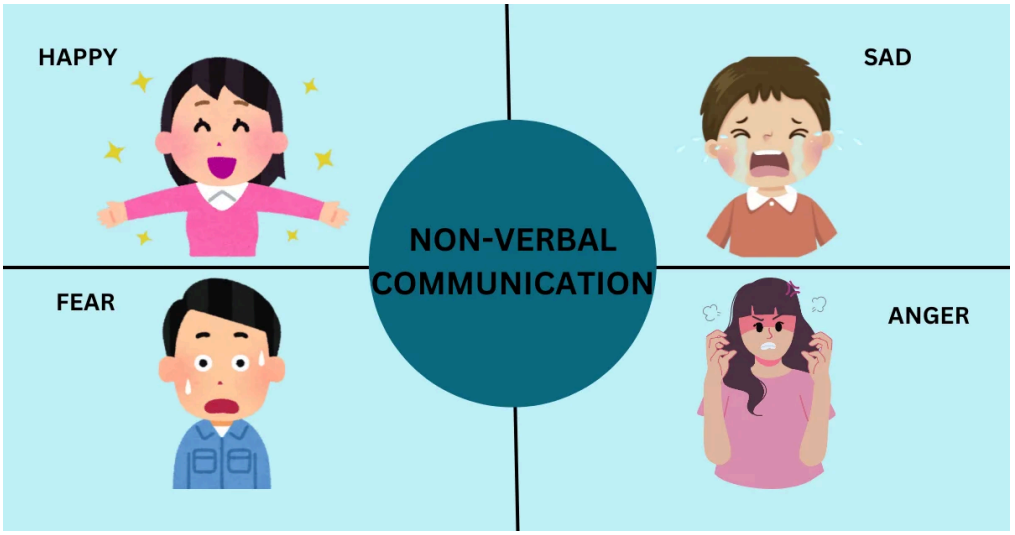
2. **Written Communication:**
   Involves writing letters, emails, reports, and resumes.

    - Example: Sending a professional email to apply for a job.

## Qualities of Good Verbal Communication

- Speak clearly and confidently.
- Use polite and respectful language.
- Listen carefully before responding.
- Avoid slang or informal words in professional situations.
- Maintain a positive tone and attitude.

## Non-Verbal Communication



Non-verbal communication means expressing messages **without using words**.
It includes gestures, facial expressions, posture, and eye contact.

In professional situations, non-verbal communication is as important as words — because your **body language** often speaks louder than what you say.

## Types of Non-Verbal Communication

1. **Gestures:**
   Movements of hands or arms that support verbal communication.
   Example: Nodding your head to show agreement.

2. **Facial Expressions:**
   The look on your face conveys emotions like happiness, confidence, or concern.

3. **Eye Contact:**
   Maintaining eye contact shows attentiveness and honesty. Avoid staring or looking away too often.

4. **Posture:**
   Sit or stand straight to show confidence and interest. Avoid crossing arms or slouching.

5. **Appearance:**
   Dress neatly and appropriately for formal settings. It gives a positive first impression.

## Importance of Non-Verbal Communication

- Builds trust and confidence.
- Supports and strengthens verbal communication.
- Helps express emotions effectively.
- Creates a professional image.

## Listening Skills

**Listening** is the ability to **receive, understand, and respond** to spoken messages.
It is one of the most important parts of effective communication.
Good listening helps in learning, understanding others, and building strong relationships.

Listening is not the same as hearing

**Hearing** means just receiving sound,while **listening** means understanding the meaning behind those sounds.

**Importance of Listening Skills:**

- Helps in understanding ideas clearly.
- Builds trust and cooperation.
- Improves learning and concentration.
- Avoids confusion and misunderstandings.
- Essential for success in studies and workplace communication.

**Types of Listening:**

1. **Active Listening:** Paying full attention and responding appropriately.
2. **Passive Listening:** Hearing words without full attention.
3. **Critical Listening:** Evaluating and analyzing the message.
4. **Empathetic Listening:** Understanding the speaker's feelings and emotions.

**Barriers to Good Listening:**

- Lack of focus or interest.
- Interrupting the speaker.
- Noise or distractions.
- Prejudgment or bias.
- Emotional reactions or anger.

**How to Improve Listening Skills:**

- Focus fully on the speaker.
- Avoid interrupting while others talk.
- Maintain eye contact and show interest.
- Ask questions to clarify doubts.
- Keep an open and patient attitude.

## Group Discussion (GD) Skills


A **Group Discussion** is a formal discussion among a small group of people on a specific topic.
It is used by companies and colleges to test your **communication, teamwork, and leadership** skills.

### Qualities Evaluated in GD

- Communication and clarity of thoughts
- Confidence and leadership
- Listening and respecting others' opinions
- Ability to stay on topic
- Positive attitude and teamwork

### Tips for Effective Group Discussion

- Start the discussion confidently.
- Speak politely and logically.
- Don't interrupt others.
- Use facts, examples, or data to support your points.
- Conclude positively.

### Example GD Topics

- "Social Media: A Boon or a Bane?"
- "Online Education vs Traditional Learning"
- "Role of Technology in Modern Jobs"

## Public Speaking :

**Public Speaking** is the skill of **speaking confidently in front of an audience** to share ideas, information, or opinions. It is an important part of communication and is used in schools, workplaces, and public events.

Public speaking helps in developing leadership qualities, improving confidence, and building the ability to influence others. A good public speaker does not just talk — they connect with the audience emotionally and intellectually.

Public speaking means addressing a group of people in a structured and deliberate manner to **inform, persuade, or entertain**.
It is a skill that combines both **verbal communication** (words) and **non-verbal communication** (gestures, posture, eye contact).

**Importance of Public Speaking:**

1. **Builds Confidence:** Helps overcome stage fear and shyness.
2. **Improves Communication:** Develops clear and effective expression.
3. **Leadership Development:** Leaders inspire others through strong speaking skills.
4. **Professional Growth:** Useful for interviews, meetings, and presentations.
5. **Influences People:** A powerful tool to motivate and convince others.

**Qualities of a Good Public Speaker**

- **Confidence:** Speak naturally and without fear.
- **Clarity:** Use simple and understandable language.
- **Voice Control:** Speak loudly enough and with proper tone.
- **Body Language:** Maintain good posture and use hand gestures effectively.
- **Eye Contact:** Look at your audience to build connections.
- **Preparation:** Be well-prepared and organized.
- **Engagement:** Interact with the audience through questions or examples.

**Tips for Effective Public Speaking**

1. **Know Your Topic:** Research well and understand what you're talking about.
2. **Know Your Audience:** Understand their interests and level of knowledge.

3. **Start Strong:** Begin with a quote, question, or short story to grab attention.
4. **Stay Calm:** Take deep breaths to manage nervousness.
5. **Practice Regularly:** The more you speak, the more confident you become.
6. **Use Visuals:** Support your speech with slides, charts, or images if needed.
7. **End Positively:** Summarize your message clearly and thank your audience.

## How to Engage the Audience

No matter how good your speech or presentation is, it will not be effective unless the **audience is interested and engaged**.
Engaging the audience means **capturing their attention**, **keeping them involved**, and making them feel connected to what you are saying.

An engaging speaker turns a one-way speech into a two-way experience — where the audience listens, reacts, and participates.

### Ways to Engage the Audience

1. **Start with a Hook:**
   Begin your talk with something that catches attention — a question, a surprising fact, or a short story.
2. **Make Eye Contact:**
   Look directly at your audience instead of reading from notes. This builds trust and connection.
3. **Use Body Language:**
   Move naturally, use hand gestures, and smile. Your body language should show confidence and energy.
4. **Ask Questions:**
   Involve your audience by asking questions or encouraging them to share thoughts.
5. **Use Visuals:**
   Include slides, pictures, or videos to make your presentation interesting and easy to understand.
6. **Relate to the Audience:**
   Use examples or experiences that match the audience's age, background, or interests.

7. **Vary Your Voice and Tone:**
   Avoid speaking in a flat tone. Use pauses and changes in voice to create emphasis and keep attention.
8. **Encourage Participation:**
   Conduct small activities, polls, or discussions if possible.
9. **Show Enthusiasm:**
   Be passionate about your topic — enthusiasm is contagious!

**Importance of Audience Engagement**

- Keeps the audience focused throughout the presentation.
- Makes the session memorable and meaningful.
- Builds connection and understanding between speaker and listener.
- Encourages feedback and interaction.
- Increases the overall effectiveness of communication.

## Elements of Presentation

A presentation is a way of communicating ideas, information, or messages to an audience. It helps in expressing thoughts clearly and developing public speaking confidence. A good presentation is well-planned, clear, and engaging.

**Meaning of Presentation**

A presentation means sharing knowledge or information in a structured manner using speech, visuals, and body language. It can be done using tools like PowerPoint, charts, or posters to make the message more effective.

### Elements of a Good Presentation

**Content:**

- The information or message that is to be shared.
- It should be clear, meaningful, and organized.
- Avoid unnecessary details and focus on main points.

**Organization:**

- Divide the presentation into three parts:

    1. Introduction: Greet the audience and introduce the topic.
    2. Body: Explain the main ideas with facts, examples, and visuals.

3. Conclusion: Summarize the key points and end with an impactful message.

**Audience Awareness**

- Understand who your audience is.
- Use suitable language, tone, and examples according to their interest and understanding.

**Visual Aids**

- Use slides, images, charts, or short videos to make the presentation interesting.
- Keep visuals simple, clear, and easy to read.

**Delivery Style**

- Speak clearly, confidently, and naturally.
- Maintain eye contact and use body language effectively.
- Avoid reading directly from notes.

**Time Management**

- Plan and practice the presentation within the given time limit.
- Give enough time to each section – introduction, body, and conclusion.

**Engagement**

- Interact with the audience through questions or short activities.
- Encourage feedback or participation to maintain interest.

**Confidence & Body Language**

- Stand straight and appear confident.
- Use hand gestures and facial expressions to support your message.

**Use of Technology**

- Use tools like PowerPoint, Canva, or Prezi for designing slides.
- Check all technical equipment before starting the presentation.

**Tips for Effective Presentation**

- Start with an interesting quote, story, or question.
- Keep slides neat and avoid too much text.

- Practice before presenting to improve timing and confidence.
- End with a strong conclusion or message.

**Activity:** Present Yourself , Group Discussion

**Summary:**

- *Communication is the ability to express ideas clearly through verbal (spoken/written) and non-verbal (body language) methods.*
- *Good speaking, listening, posture, eye contact, and confidence are essential for effective communication in studies and professional life.*
- *Group discussions and public speaking help build clarity, confidence, leadership, and teamwork.*
- *Audience engagement—through eye contact, questions, stories, and visuals—makes presentations more effective and interesting.*
- *A good presentation requires clear content, proper organization, visuals, confidence, and good delivery skills.*

# Unit 11: Formal Communication

## Introduction to Email

Email (Electronic Mail) is a digital method to send and receive messages over the internet. It is widely used in **personal, educational, and professional communication**.

**Importance of Email:**

- Fast and reliable communication
- Send attachments like documents, images, presentations
- Maintains a record of communication
- Can reach multiple recipients simultaneously

## Structure of Formal Emails

A professional email should follow a clear structure:

1. **Subject:** Short and precise; describe purpose
    - Example: “Project Submission – Data Analysis Report”
2. **Greeting / Salutation:** Start politely
    - Example: “Dear Sir/Madam,” or “Hi Rohit,”

3. **Body:** Main message, clear and concise
    - Use short paragraphs, polite and professional tone
4. **Closing / Signature:** End politely with your details
    - Example: “Best regards, Anmol Tyagi”

**Tip:** Proofread before sending to avoid mistakes

## Steps to Send an Email:

**Step 1: Open Gmail**

👉 Go to www.gmail.com or open the Gmail app on your phone.

**Step 2: Login**

👉 Enter your email ID and password.

**Step 3: Click on “Compose”**

👉 It means “write a new message”.

**Step 4: Fill the Email:**

- To – Write the email address of the person you want to send (e.g. teacher@gmail.com)
- Subject – Write the title (e.g. *Homework*)
- Message – Write your message (e.g. *Hello Ma’am, I am sending my homework.*)

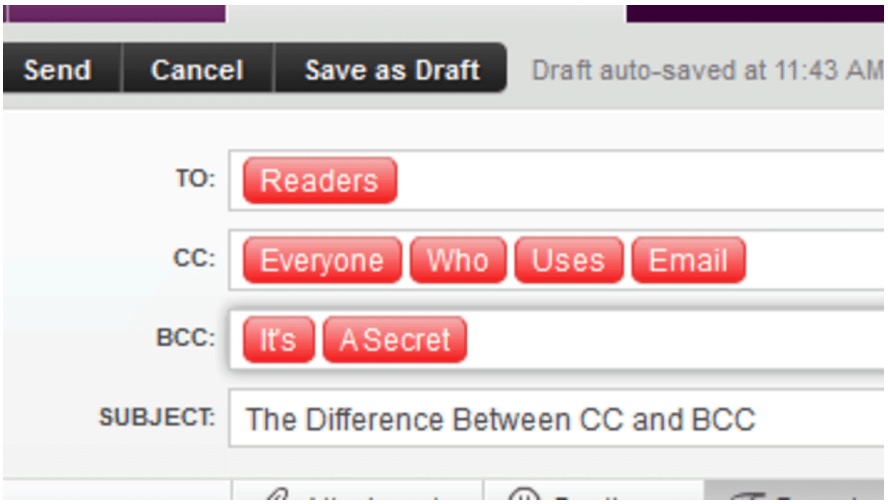
**Step 5: Attach File (Optional)**

👉 Click the 📎 **paperclip** to add a file or photo.

**Step 6: Click “Send”**

👉 Your email will be sent.

## Using CC & BCC

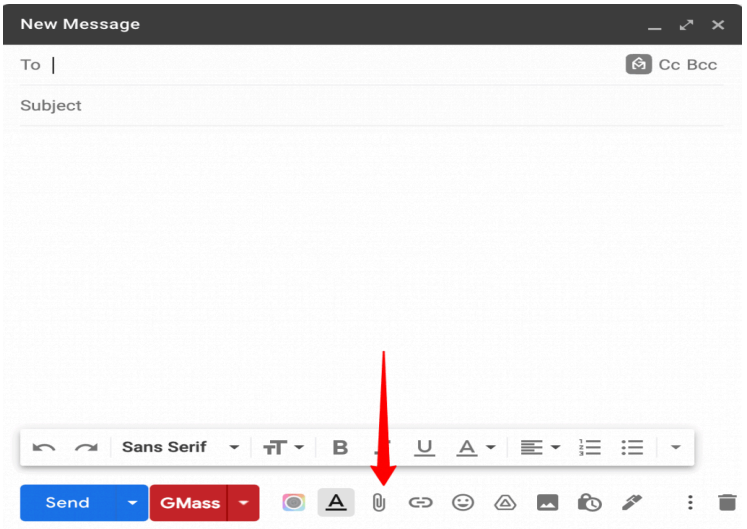



- **CC (Carbon Copy):** Send copy to others for awareness
- **BCC (Blind Carbon Copy):** Send to recipients without showing addresses

**Use cases:**

- CC → Inform colleagues or teachers
- BCC → Protect privacy in mass emails

## Attaching Documents Securely




**Steps:**

1. Click **Attach / Paperclip icon**
2. Select the file (PDF, Word, Excel)

3. Ensure file size is within limit
4. Mention the attachment in the email body

**Tip:** Double-check attachments before sending

## Professional Email Tone

- Use polite, respectful language
- Avoid slang or casual words
- Keep sentences short and clear
- Use proper punctuation and capitalization

**Example:**

- Professional: “Please find attached the report for your review.”
- Unprofessional: “Hey, see the file I sent you.”

**Extra Tips**

- Use a professional email address (example: firstname.lastname@gmail.com)
- Avoid sending emails in ALL CAPS (looks like shouting)
- Reply within 24 hours to maintain professionalism
- Use bullet points for clarity in long emails

## Data Sharing

Data Sharing in Cloud Services means storing and accessing files on the internet and allowing others to view, edit, or download them from anywhere, anytime.
It helps users collaborate online without using pen drives or local storage devices.

## Cloud Storage

## Introduction to Cloud Storage

- Google Cloud Services are **online tools provided by Google** that help individuals, schools, and businesses **store, manage, and use data safely on the internet**.
- Instead of keeping everything only on a computer or hard disk, we can save our files, documents, photos, and applications on Google's cloud.
- This makes it possible to **access files anywhere, anytime, from any device** (computer, tablet, or mobile phone).
- Google Cloud Services also provide many **applications for working, learning, and sharing**.



**Benefits:**

- **Accessibility** – Files can be opened anytime with internet connection.

- **Collaboration** – Many people can work together on the same file at the same time.
- **Data Safety** – Data is protected with Google's strong security system.
- **Cost Saving** – No need to buy extra storage devices like pen drives or external hard disks.
- **Automatic Updates** – Apps and services get updated automatically.
- **Backup Facility** – If a device is lost or damaged, data is still safe online.

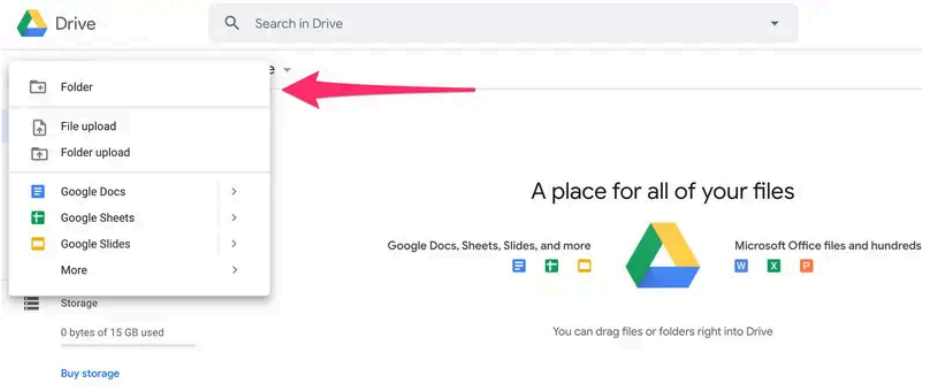
## Importance of Cloud Services:

- For Students and Teachers – Helps in sharing homework, notes, assignments, and presentations. Online classes and group projects become easier.
- For Business – Companies use it for storing data, running software, and working with teams across the world.
- For Daily Life – People use Google Drive, Gmail, and Google Photos to keep documents and memories safe.
- For Innovation – Developers use Google Cloud to build apps, websites, and smart technologies.
- For Remote Work – In today's world, cloud services make it possible to work from home or any location.

## Examples of Cloud Services:

- Google Drive
- OneDrive
- iCloud

## Uploading & Organizing Files



**Steps:**

1. Open cloud storage account
2. Click **Upload → File / Folder**
3. Select files from your computer
4. Organize into folders

**Tips:**

- Use clear folder names
- Group similar files
- Avoid clutter for easy access

## Sharing Files

**Steps:**

1. Right-click file → **Share**
2. Enter recipient emails
3. Set permission (**View / Comment / Edit**)
4. Click **Send**

**Tip:** Only share with authorized users

**Extra Tips**

- Regularly backup important files
- Keep folders and file names consistent
- Use two-factor authentication for security
- Check file permissions before sharing

**Activity:** Discuss on email creation

**Summary:**

- *Email is a fast and professional way to communicate, send files, and keep records of messages.*
- *A formal email includes a clear subject, polite greeting, short and organized body, and proper closing with your name.*
- *CC and BCC help share information with others while maintaining privacy when needed.*
- *Cloud storage allows storing, organizing, and sharing files online safely using services like Google Drive, OneDrive, and iCloud.*
- *Cloud tools help in collaboration, data backup, and easy access to files from any device.*

# Unit 12: Leadership & Growth

## Introduction


In any organization or group activity, success depends on how well people work together.
Good leaders and team members play an important role in achieving goals efficiently.

Leadership, teamwork, and project management are three essential professional skills that help in **planning, coordinating, and completing work effectively**.
A person who can lead, make decisions, and work well with others becomes a valuable asset in any workplace.

This unit focuses on leadership qualities, teamwork roles, workplace ethics, and how to plan and manage projects with clear timelines.

## Leadership Qualities

**Leadership** means the ability to guide, influence, and motivate others to achieve common goals.
A good leader inspires the team, provides direction, and ensures that everyone contributes positively.

## Key Qualities of a Good Leader

1. **Vision:** A leader should have a clear idea of what the team wants to achieve.

2. **Communication:** The ability to convey ideas and listen to others effectively.

3. **Confidence:** Believing in oneself and making decisions without hesitation.

4. **Empathy:** Understanding team members' feelings and challenges.

5. **Responsibility:** Taking ownership of tasks and results.

6. **Integrity:** Being honest and maintaining ethical behavior.

7. **Decision-making:** Making the right choice after analyzing all options.

8. **Motivation:** Encouraging and inspiring others to do their best.

## Importance of Leadership

- Builds direction and purpose for the team.
- Improves productivity and coordination.
- Helps in solving conflicts and challenges.
- Encourages teamwork and creativity.

## Types of Leadership

| Style | Meaning | Example |
|---|---|---|
| Autocratic | Leader makes all decisions | Military commander |
| Democratic | Team participates in decisions | School project leader |
| Transformational | Inspires change and creativity | Elon Musk |
| Transactional | Focused on rules and rewards | Sales manager |
| Servant | Puts team first | Community leaders |

## Teamwork

Teamwork means working **together with a group of people** to achieve a **common goal**. It is when every team member contributes their **skills, ideas, and efforts** to complete a task successfully.

**Example:**

In a school project, when students divide the work — one makes the chart, one collects information, and another presents it — that's teamwork.

**Importance of Teamwork:**

1. **Builds cooperation:** People learn how to work together peacefully.
2. **Improves efficiency:** Tasks get done faster when everyone helps.
3. **Encourages creativity:** Different ideas from team members create better solutions.
4. **Develops communication skills:** Teamwork improves how we share and listen.
5. **Builds trust and support:** Team members rely on each other for success.

6. **Helps achieve common goals:** A team can do more than a single person.

**Qualities of a Good Team Member:**

- Cooperation
- Respect
- Good communication
- Responsibility
- Positive attitude
- Willingness to help others

## What is Growth?

**Growth** means **an increase, improvement, or positive development** in something over time. It can refer to physical size, skills, knowledge, business, economy, or any form of progress.

**In simple words:**
**Growth is the process of becoming better, bigger, stronger, or more advanced than before.**

**Types of growth:**

- **Personal Growth:** Learning new skills, gaining confidence
- **Professional Growth:** Doing better at studies or work
- **Organizational Growth:** School or business improving and achieving more

**Example:** Learning a new language or organizing a school event shows personal and professional growth.

## How Leaders Help Growth

Good leaders:

- Teach and guide others
- Give feedback to improve
- Motivate and encourage team members
- Give opportunities to try new things

**Example:** Google allows employees to work on their own ideas, helping them grow.

## Challenges in Leadership and Growth

- People may resist change
- Miscommunication can cause problems
- Limited time or resources
- Team conflicts
- Stress and pressure

**Tip:** Stay calm, communicate clearly, and learn from mistakes.

## How to Develop Leadership Skills

1. Take responsibility in class or projects
2. Learn from role models
3. Practice speaking and listening
4. Work with your team
5. Solve problems smartly
6. Learn from feedback

**Activity:** Discussion on leadership and personal growth.

**Summary:**

- *Leadership means guiding and motivating others with qualities like vision, confidence, communication, and responsibility.*
- *Teamwork helps people work together, share tasks, build trust, and achieve common goals efficiently.*
- *Growth refers to improving skills, knowledge, and performance at personal, professional, and organizational levels.*
- *Good leaders support growth by motivating the team, giving feedback, and creating opportunities to learn.*
- *Leadership and growth require overcoming challenges through clear communication, cooperation, and continuous learning.*

# Unit 13: Professional use of Social Media

## Introduction to Social Media

Social media refers to **web-based platforms and mobile apps** that allow people to **create, share, and exchange information, photos, and videos** in virtual communities.

## Types of Social Media:

| Type | Examples | Purpose |
|---|---|---|
| **Social Networking Sites** | Facebook, Instagram | Connect with friends and share posts. |
| **Professional Networking Sites** | LinkedIn | Build career contacts and find jobs. |
| **Media Sharing Platforms** | YouTube, Snapchat | Share videos and tutorials. |
| **Microblogging Sites** | X (Twitter), Threads | Share short updates or ideas. |
| **Messaging Apps** | WhatsApp, Telegram | Send instant messages and files. |
| **Discussion Forums** | Quora, Reddit | Share knowledge and opinions. |

### Importance of Social Media:

- Improves global communication.
- Enhances learning and information sharing.
- Builds personal and professional connections.
- Promotes business and career opportunities.
- Encourages creativity and innovation.

## Popular Social Media Platforms

| Platform | Main Use |
|---|---|
| **Facebook** | Social connection, sharing updates and photos. |
| **Instagram** | Visual storytelling and creativity. |
| **LinkedIn** | Professional networking and job search. |
| **YouTube** | Educational and entertainment videos. |
| **X (Twitter)** | Sharing quick updates and opinions. |
| **Telegram / WhatsApp** | Fast communication and document sharing. |

## Professional Use of Social Media

### Building Online Presence:

Your **online presence** is how people view you on the internet — through your posts, achievements, and profiles.
A positive and active online presence builds **trust and credibility**.

### Personal Branding:

**Personal Branding** means creating a unique and professional image of yourself online by showing your **skills, achievements, and personality**.

- Share your learning experiences or creative work.
- Keep your online tone positive and respectful.
- Follow experts or pages related to your field.

*Example:* A student sharing their artwork, a coding project, or a business idea on LinkedIn.

## Using Social Media for Career Growth

### Networking:

- Connect with teachers, seniors, and professionals.
- Join online study or career groups.
- Follow mentors and organizations in your career field.

### Sharing Skills & Achievements:

- Post your certificates, projects, and creative work.
- Share blogs or thoughts about your learning journey.
- Tag institutions or companies where you've worked or volunteered.

### Benefits:

- Increases visibility and recognition.
- Helps in finding internships or job opportunities.
- Builds your personal and professional confidence.

## Introduction to Job Portals

Job portals help people **search and apply for jobs online** easily.

| Job Portal | Features |
|---|---|
| **Naukri.com** | India's most used site for all sectors and skill levels. |
| **Indeed** | Global job search platform. |
| **LinkedIn Jobs** | Built into LinkedIn — matches your profile to job openings. |

## LinkedIn

**LinkedIn** is a **professional networking platform** that helps students, job seekers, and professionals **connect, learn, and grow** in their careers.

It allows users to:

- Create a **digital professional profile** (like a resume).
- Connect with professionals, teachers, and mentors.
- Search and apply for **internships and jobs**.
- Share achievements, skills, and ideas.

- Learn new skills through **LinkedIn Learning** courses.

## Why LinkedIn is Important for Students:

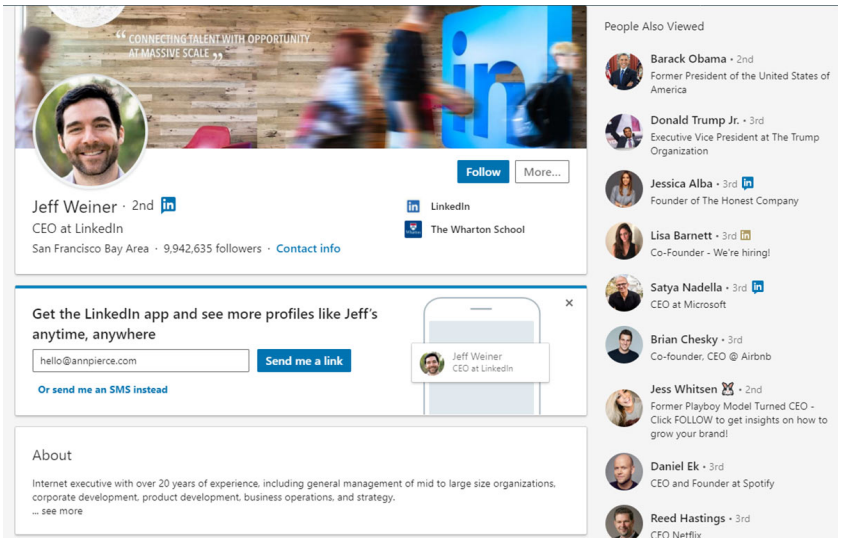
- Helps in **building a career identity** early.
- Connects with industry professionals and college alumni.
- Shows your skills, certifications, and education to recruiters.
- Allows you to discover **career paths and opportunities**.
- Build your confidence and communication skills online.

## How to Create a LinkedIn Profile:

1. **Visit:** www.linkedin.com
2. **Sign Up** with your email and create a password.
3. **Upload a Professional Profile Picture.**
    - Clear background, formal dress, smiling face.
4. **Write a Headline:** (Example: "Class 12 Student | Aspiring Graphic Designer")
5. **Add About / Summary:**
    - 2–3 lines about your interests and career goals.
    - Example: "I am a motivated commerce student interested in accounting and finance. I enjoy learning new tools and exploring opportunities to grow."
6. **Add Education:**
    - Include your school/college name, class, and stream.
7. **Add Skills:**
    - Example: MS Office, Communication, Teamwork, Graphic Design, Problem Solving.
8. **Add Certificates / Achievements:**
    - Include online courses, competitions, or volunteer work.
9. **Follow Companies and Mentors:**
    - Helps you stay updated on jobs and career news.

10. **Keep Updating:**

    - Post when you complete a project or learn something new.




## LinkedIn Do's and Don'ts

| Do's | Don'ts |
|---|---|
| Use a clear, professional photo. | Don't use selfies or funny pictures. |
| Keep your information accurate and updated. | Don't share personal or false information. |
| Connect with known or professional people. | Avoid random or unknown connections. |
| Be polite and respectful online. | Don't post negative or unprofessional content. |

## Photo Protection

**Photo protection** means keeping your personal or professional photos **safe from misuse, editing, or unauthorized sharing** on the internet.
When you share a photo online, anyone can download, copy, or misuse it if proper safety settings are not applied.

### Why Photo Protection is Important:

- Prevents others from using your images without permission.
- Keep your **identity and privacy** safe.

- Protects your creative work (like designs, artwork, or photography).
- Maintains a **positive online reputation**.

## Tips for Protecting Photos Online:

| Protection Tip | Explanation |
|---|---|
| **1. Use Privacy Settings** | On apps like Facebook, Instagram, or LinkedIn, set photos to “Friends Only” or “Private.” Avoid “Public” sharing. |
| **2. Add Watermarks** | Add your name or logo on creative or professional photos to prevent copying. |
| **3. Avoid Personal Photos** | Do not upload private, family, or location-based photos on public platforms. |
| **4. Disable Download Option** | Some sites allow you to turn off the download or save option for your photos. |
| **5. Check Tagged Photos** | Review photos others tag you in and remove unwanted ones. |
| **6. Share Only on Trusted Platforms** | Use verified and secure platforms like Google Drive or LinkedIn for professional use. |

## Photo & Data Protection:

- Use **privacy settings** to control who can see your posts.
- Avoid sharing private or family pictures publicly.
- Add **watermarks** to creative photos or artwork.
- Check app permissions before uploading content.

- **Activity:** Create a LinkedIn profile highlighting career interests

## Summary:

- *Social media includes platforms like Facebook, Instagram, LinkedIn, YouTube, and WhatsApp used for communication, learning, and sharing content.*
- *It helps build a professional online presence, develop personal branding, and showcase skills, achievements, and career interests.*
- *Platforms like LinkedIn and job portals (Naukri, Indeed) support networking, internships, and job opportunities for students and professionals.*
- *Using privacy settings, avoiding public sharing of personal photos, and adding watermarks help protect photos and data online.*
- *Social media, when used responsibly, enhances career growth, creativity, and professional connections.*

# Unit 14: Career Readiness Skills

## Introduction

Career Readiness Skills help students prepare for future job opportunities and professional growth. These skills include creating a strong resume, preparing for interviews, and developing confidence to present oneself effectively.
They play a key role in helping students transition from school to higher studies or employment.

## Resume Writing


A resume is a short, written summary of a person's education, skills, achievements, and experience.
It is used to apply for jobs, internships, or higher education opportunities. A well-made resume creates a positive first impression on employers.

### Importance of a Resume

- It highlights your skills and qualifications.
- Helps the employer understand your suitability for a job.
- Creates a professional image of the candidate.

- Acts as a marketing tool to present yourself effectively.

## Parts of a Resume

1. Personal Information
    - Name, address, contact number, and email ID.
2. Career Objective
    - A short statement that describes your professional goal.
      *Example:* "To build a successful career in the IT industry using my technical and communication skills."
3. Educational Qualifications
    - List of schools/colleges attended with marks and year of passing.
4. Skills
    - Technical, communication, leadership, or computer skills.
5. Work Experience / Internships (if any)
    - Details of previous jobs, projects, or internships.
6. Achievements / Extracurricular Activities
    - Awards, certificates, or activities that show your strengths.
7. References (Optional)
    - Names of teachers or mentors who can recommend you.

## Tips for Writing an Effective Resume

- Keep it short (1 page) and easy to read.
- Use simple fonts and clear headings.
- Avoid spelling or grammar mistakes.
- Customize the resume according to the job or course applied for.

## Interview Preparation

An interview is a formal meeting between an employer and a candidate to assess whether the candidate is suitable for a particular job or role.

### Types of Interviews

- Personal Interview: One-on-one discussion.
- Panel Interview: Conducted by a group of interviewers.
- Telephonic or Online Interview: Conducted through phone or video call.

## Steps for Interview Preparation

1. Research the Company / Institution
    - Know about its background, services, and values.
2. Understand the Job Role
    - Read the job description carefully.
3. Prepare Common Questions
    - Tell me about yourself.
    - What are your strengths and weaknesses?
    - Why do you want to work with us?
    - Where do you see yourself in 5 years?
4. Dress Professionally
    - Wear neat and formal clothes.
5. Body Language and Communication
    - Maintain eye contact, smile, and sit confidently.
    - Speak clearly and politely.
6. Follow-Up
    - Thank the interviewer after the session.

## Interview Do's and Don'ts

| Do's | Don'ts |
|---|---|
| Be punctual | Arrive late |
| Be polite and confident | Argue or interrupt |
| Listen carefully | Avoid looking distracted |
| Ask questions politely | Don't criticize past experiences |

**Activity**:Mock interview & self-introduction session

**Summary:**

- *Career readiness skills prepare students for jobs by improving resume writing, interview performance, and professional confidence.*
- *A resume highlights a person's education, skills, achievements, and goals, helping employers understand suitability for a role.*
- *Effective interview preparation includes researching the company, understanding the job role, practicing common questions, and maintaining proper body language.*
- *Good communication, confidence, punctuality, and professional appearance are essential during interviews.*
- *These skills help students transition smoothly from school to higher studies or employment.*

# Unit 15: Health & Wellness

## What is health?

Health means the complete well-being of a person – **physically, mentally, and socially**.
It is not only about being free from illness but also about living a balanced and active life.
Good health allows us to work, study, and enjoy life happily.
It includes **physical health** (body fitness), **mental health** (positive thinking), and **social health** (good relationships).
A healthy lifestyle with proper food, exercise, rest, and hygiene keeps us healthy.

## Types of Health:

1. **Physical health.**
2. **Mental health.**

## Physical health

Physical health means the overall condition of your body — how well it functions, how strong it is, and how well you can perform everyday activities without getting tired or sick.

## Key Aspects of Physical Health:

**1. Healthy Food**

- Your body needs energy to grow and work properly.
- Eat a balanced diet that includes fruits, vegetables, milk, pulses, cereals, etc.
- Avoid junk food and too much sugar or oily food.

**2. Exercise and Physical Activity**

- Regular movement helps muscles and bones stay strong.
- Activities like walking, yoga, running, cycling, and sports improve blood flow and make your heart strong.

**3. Hygiene and Cleanliness**

- Keeping your body clean prevents infections and diseases.
- Brush your teeth twice a day, take a bath daily, wash your hands before eating.

**4. Rest and Sleep**

- Sleep allows the body to repair itself and stay fresh.
- Students should get at least 7–9 hours of sleep every night.

**5. Avoiding Harmful Habits**

- Stay away from smoking, alcohol, and unhealthy eating habits.
- Limit screen time (TV/mobile) and avoid laziness.

## Benefits of Good Physical Health:

- You stay strong and active all day
- Your body can fight diseases better (strong immunity)
- You can study, play, and focus more effectively
- You feel happy and confident
- It helps in growing properly — both height and strength

## What is Mental Health?

**Mental health** is the state of our **mind** and **emotions**. It includes how we **think**, **feel**, and **act**. It also helps us cope with stress, relate to others, and make healthy choices in life.

### Key Points about Mental Health:

**1. Good Mental Health Means:**

- Feeling happy or content.
- Being able to handle daily stress.
- Having good relationships.
- Being productive in work or studies.

**2. Poor Mental Health May Include:**

- Feeling sad or low for a long time.
- Anxiety, fear, or worry.
- Trouble sleeping or eating.
- Difficulty in concentrating.

**Common Mental Health Issues**

- **Depression:** Persistent sadness and loss of interest**.**
- **Anxiety:** Constant worry or fear.
- **Stress:** Feeling overwhelmed due to pressure.
- **Mood Swings**

**Why is Mental Health Important?**

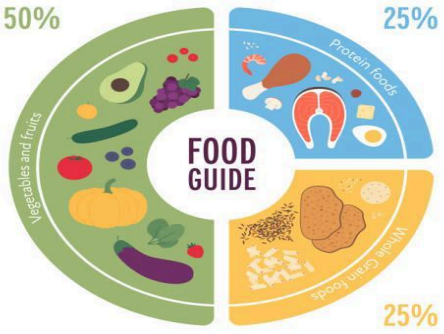
- It improves quality of life.
- Helps in clear thinking and decision making.
- Build better relationships.
- Supports physical health.
- Increases confidence and focus.

**Tips to Maintain Mental Health**

1. **Talk to someone –** Share your feelings**.**
2. **Exercise daily –** Physical activity boosts mood.
3. **Eat healthy –** Good nutrition supports the brain**.**
4. **Get enough sleep** – Sleep repairs mind and body.
5. **Practice mindfulness or meditation.**

## What is Nutrition

**Nutrition** is the process of getting the right kind of **food** and **nutrients** your body needs to grow, stay healthy, and work properly




## Why is Nutrition Important?

- Gives energy to the body
- Helps in growth and development
- Keeps bones, muscles, and organs strong
- Increases immunity to fight diseases
- Keeps mind and body active

## Essential Nutrients in Food:

| Nutrient | Use in Body | Sources |
|---|---|---|
| Carbohydrates | Gives energy | Rice, chapati, bread, potatoes |
| Proteins | Builds muscles and body parts | Milk, eggs, pulses, meat |
| Fats | Gives energy and helps store vitamins | Ghee, oil, nuts |
| Vitamins | Protect from diseases and keep body healthy | Fruits, vegetables |
| Minerals | Help in bone, blood, and body functions | Salt, milk, spinach |
| Water | Keeps body hydrated and cool | Clean drinking water, fruits |
| Fibre | Helps in digestion | Whole grains, fruits, vegetables |

## What is a Balanced Diet?

A balanced diet includes food from all major nutrient groups in the right amount — not too much, not too little.


## Poor Nutrition Can Cause:

- Weakness or tiredness
- Poor growth in children
- Frequent illness
- Obesity or being underweight
- Poor concentration in studies

## Healthy Nutrition Habits:

- Eat fresh fruits and vegetables daily
- Drink plenty of water
- Avoid junk food, soft drinks, and too much sugar
- Have regular meals at the right time
- Include milk, grains, and protein-rich food in diet

## What is Yoga?

Yoga is a physical, mental, and spiritual practice that helps keep the body strong and the mind calm.

## Benefits of Yoga:

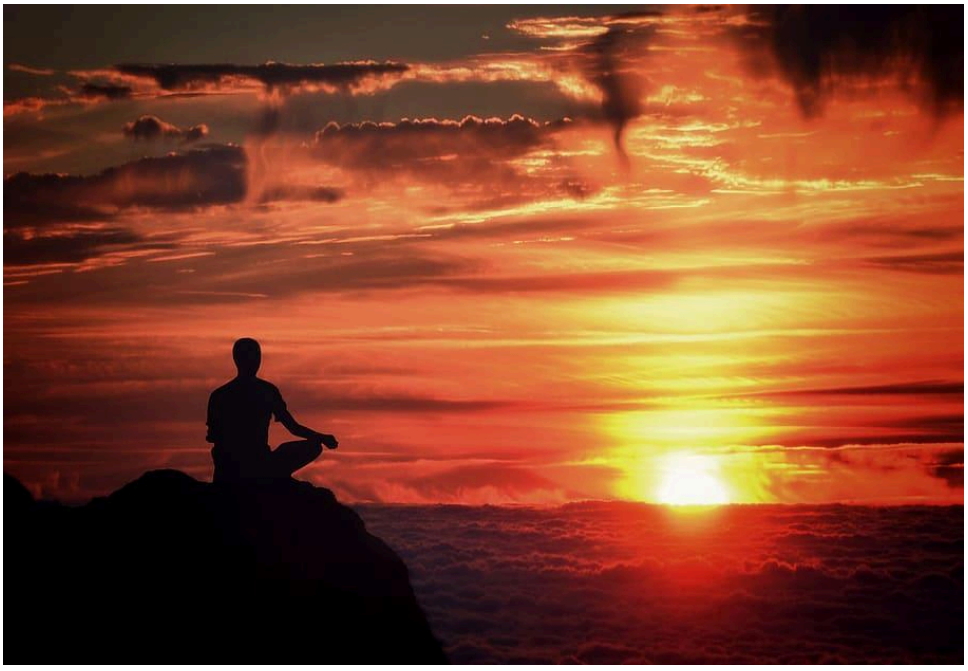
| Benefit | Explanation |
|---|---|
| Improves flexibility | Makes the body more flexible and active |
| Builds strength | Strengthens muscles and joints |
| Reduces stress | Makes the mind calm and peaceful |
| Improves breathing | Helps in better control of breath (Pranayama) |
| Boosts concentration | Helps in focusing better on studies or work |
| Keeps you healthy | Helps prevent many diseases and improves digestion |

## Examples of Simple Yoga Asanas (Poses):

| Asana Name | Use |
|---|---|
| Tadasana (Mountain) | Improves posture and balance |
| Vrikshasana (Tree) | Builds concentration and balance |
| Bhujangasana (Cobra) | Strengthens back and improves posture |
| Vajrasana | Good for digestion |

## What is Meditation?

Meditation is a way to relax your mind and focus on your breath, thoughts, or a mantra.



### Benefits of Meditation:

- Reduces anxiety and stress
- Improves focus and memory
- Increases self-awareness
- Helps with better sleep
- Makes the mind calm and peaceful

### How to Practice Meditation

1. Sit comfortably in a quiet place
2. Close your eyes
3. Breathe slowly and deeply
4. Focus on your breath or a calming word
5. Do it for 5–10 minutes daily

**Activity:** Create a daily Routine Chart

**Summary:**

- *Health means complete physical, mental, and social well-being, not just the absence of illness.*
- *Physical health improves through balanced nutrition, exercise, hygiene, proper sleep, and avoiding harmful habits.*
- *Mental health focuses on emotions, thoughts, stress management, and healthy relationships; good habits like talking, exercising, and sleeping well support it.*
- *Good nutrition provides essential nutrients that help the body grow, stay strong, and fight diseases; a balanced diet is important for overall health.*
- *Yoga and meditation improve flexibility, strength, focus, calmness, and overall wellness.*

# Unit 16: Civic Engagement & Social Responsibility

## Volunteering

Volunteering means giving your time, energy, or skills to help others or support a good cause without expecting payment.


**Uses:**

- Helps in personal growth and skill development.
- Builds a strong social network.
- Encourages teamwork and leadership.

**Advantages:**

- Improves confidence and communication skills.
- Enhances empathy and social awareness.
- Gives real-life experience and satisfaction of helping others.
- Makes a positive impact on the community.

**Examples of Volunteer Opportunities:**

- Teaching underprivileged children.
- Tree plantation or cleanliness drives.
- Helping in blood donation or health camps.
- Supporting NGOs and community programs.

## Community Engagement

Community engagement means taking part in collective efforts to improve your surroundings and help others in your area.


**Uses:**

- Builds a sense of belonging and cooperation.
- Encourages students to take social responsibility.
- Promotes collective problem-solving.

**Advantages:**

- Improves communication and teamwork skills.
- Build leadership qualities.
- Strengthens relationships between community members.
- Promotes unity and understanding among people.

**Examples:**

- Awareness campaigns (health, education, environment).
- Local cleanliness or development projects.
- Participating in disaster relief work.

## Conflict Management

Conflict management is the process of resolving disagreements peacefully and respectfully.


**Uses:**

- Helps in maintaining harmony in personal and professional life.
- Builds negotiation and emotional control skills.
- Improves relationships and teamwork.

**Advantages:**

- Reduces stress and misunderstandings.
- Encourages cooperation and problem-solving.
- Promotes positive communication and empathy.

**Methods of Conflict Resolution:**

1. Stay calm and listen actively.
2. Respect others' opinions.
3. Find a solution that benefits everyone.
4. Seek mediation if needed.

## Responsible Citizenship

Every person who lives in a country is its citizen. Citizenship gives us certain rights such as the right to freedom, education, and equality — but it also brings duties and responsibilities.
Being a responsible citizen means using our rights wisely and performing our duties sincerely for the welfare of society and the nation.

A responsible citizen is not only concerned about personal benefit but also works for the betterment of others. Such citizens make a nation peaceful, strong, and progressive.

**Responsible Citizenship** means behaving in a manner that shows care, respect, and concern for other people and for the community.
It involves following laws, respecting diversity, being honest, and helping to maintain peace and harmony.

In simple terms, a responsible citizen is a person who contributes positively to society by performing their duties and respecting the rights of others.

**Qualities of a Responsible Citizen**

1. **Obeys Laws:**
   A responsible citizen follows the rules and laws of the country and helps maintain order.
2. **Honest and Truthful:**
   They speak the truth, avoid corruption, and act ethically in daily life.
3. **Respectful:**
   They respect other people's opinions, religions, and backgrounds.
4. **Environmentally Aware:**
   They protect natural resources, avoid pollution, and support sustainability.
5. **Helpful and Kind:**
   They help those in need and participate in community welfare.
6. **National Pride:**
   They show respect for the national flag, anthem, and culture.
7. **Active Participation:**
   They vote in elections, follow current issues, and work for social change.

## Rights and Responsibilities of Citizens

Every citizen has certain rights that provide freedom and protection, but these come with matching responsibilities.

| Rights of Citizens | Responsibilities of Citizens |
|---|---|
| Right to Freedom | Use freedom without harming others or breaking the law. |
| Right to Education | Study sincerely and use knowledge to help society. |
| Right to Equality | Treat all people equally without discrimination. |
| Right to Vote | Vote wisely and participate in democratic activities. |
| Right to Live in a Clean Environment | Keep surroundings clean and protect the environment. |

## Role of Responsible Citizens in Nation-Building

- **Maintain Peace and Unity:** Encourage harmony among people of different cultures and religions.
- **Follow the Law:** Respect traffic rules, pay taxes, and avoid corruption.
- **Help Others:** Volunteer for social work or community development.
- **Protect Nature:** Save water, plant trees, and avoid wastage.
- **Promote Equality:** Stand against discrimination and injustice.
- **Be Informed:** Stay updated about national issues and government policies.

## Importance of Responsible Citizenship

Responsible citizenship is the foundation of a strong and developed nation. When people act responsibly, society becomes fair, peaceful, and progressive. It creates trust between citizens and government and ensures that everyone lives with dignity.

Such citizens make a country democratic not just by law, but also by action and behavior.

## **Activity:** Share Their Ideas on How Young People can make a Difference in Society

**Summary:**

- *Volunteering and community engagement help students develop empathy, teamwork, leadership, and a sense of responsibility toward society.*
- *Conflict management teaches calm communication, respectful listening, and peaceful problem-solving to maintain harmony.*
- *Responsible citizenship means following laws, respecting others, protecting the environment, and contributing positively to society.*
- *Citizens have rights like freedom, education, and equality, but also matching duties such as voting wisely, keeping surroundings clean, and treating everyone fairly.*
- *When people act responsibly, they help build a peaceful, united, and progressive nation.*

# सक्षम

.....सीखो, बढ़ो, सक्षम बनो