

# TABLE OF CONTENTS

<b>UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE</b> .....	5
Q1. WHAT IS OPEN SOURCE SOFTWARE?.....	5
Q2. WHAT IS PROPRIETARY SOFTWARE? .....	5
Q3. WHAT IS MICROSOFT OFFICE SUITE 2016? .....	5
Q4. EXPLAIN MS OFFICE APPLICATIONS' PRIMARY USER INTERFACE? .....	5
<b>UNIT #2: MICROSOFT WORD</b> .....	6
Q5. EXPLAIN GENERAL FEATURES OF WORD PROCESSORS .....	6
<b>BASIC EDITING COMMANDS</b> .....	7
COMMAND: CREATING A NEW DOCUMENT.....	8
COMMAND: SAVING A DOCUMENT FOR THE FIRST TIME. ....	8
COMMAND: SAVING DOCUMENT IN DIFFERENT FILE FORMATS .....	8
COMMAND: CREATING A DOCUMENT USING A TEMPLATE .....	8
COMMAND: USING PRINT PREVIEW .....	9
COMMAND: TO PRINT A DOCUMENT .....	9
COMMAND: OPENING AN EXISTING DOCUMENT.....	9
COMMAND: USING ZOOM .....	9
COMMAND: FINDING AND REPLACING TEXT .....	10
COMMAND: AUTOCORRECT.....	10
<b>TEXT FORMATTING</b> .....	10
COMMAND: USING THE FONT GROUP .....	10
COMMAND: USING FORMAT PAINTER .....	11
COMMAND: APPLYING STYLES .....	11
COMMAND: CREATING AND MODIFYING WORDART .....	12
COMMAND: USING THE CLEAR FORMATTING BUTTON.....	12
<b>PARAGRAPH FORMATTING</b> .....	13
COMMAND: WHAT IS PARAGRAPH FORMATTING? .....	13
COMMAND: SETTING INDENTS (FIRST LINE, HANGING, LEFT, RIGHT) .....	13
COMMAND: SETTING LINE SPACING .....	14
SETTING PARAGRAPH SPACING.....	14
Command: Ceating a Bulleted List, Creating a Numbered List .....	15
<b>PAGE FORMATTING &amp; PRINTING</b> .....	16
Setting Margins .....	16
Selecting page orientation.....	17
Choosing paper size, .....	17
Number of Columns setting .....	18
Page & Section Breaks.....	18
Selection of Printer, .....	19

## UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE

Print settings.....	19
<b>CREATING TABLES .....</b>	<b>20</b>
<b>INTRODUCTION: .....</b>	<b>20</b>
To insert a blank table:.....	20
To convert existing text to a table:.....	20
<b>MODIFYING TABLES .....</b>	<b>20</b>
To add a row or column: .....	20
To delete a row or column: .....	20
<b>TO APPLY A TABLE STYLE:.....</b>	<b>20</b>
To modify table style options: .....	20
To apply borders to a table: .....	21
<b>MODIFYING A TABLE USING THE LAYOUT TAB .....</b>	<b>21</b>
Rows and Columns .....	21
Merge and Split Cells.....	21
Change Cell Size.....	21
Distribute Rows/Columns .....	21
Align Cell Text .....	21
Change Text Direction.....	21
<b>USE OF FORMULA IN A TABLE CELL.....</b>	<b>21</b>
Insert a formula in a table cell.....	21
<b>URDU LANGUAGE SETTING AND TYPING .....</b>	<b>21</b>
How to Change the Language Settings to Urdu on Your Computer .....	21
<b>MICROSOFT EXCEL.....</b>	<b>22</b>
General Features of Spreadsheets .....	22
<b>WORKING WITH EXCEL.....</b>	<b>23</b>
1. Creating a new workbook .....	23
2. Opening an existing workbook .....	23
3. Entering basic data .....	23
4. Deleting and Clearing Cell Contents .....	23
5. Cutting, Copying and Pasting Data.....	24
<b>FORMATTING CELLS AND WORKSHEETS .....</b>	<b>24</b>
Inserting and deleting cells .....	24
Merge and unmerge cells .....	24
Format cells by using format painter .....	24
Insert headers and footers .....	24
Add a worksheet to an existing workbook.....	25
Change magnification by using zoom tools.....	25
<b>USING FORMULAS AND FUNCTIONS.....</b>	<b>25</b>

## UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE

Using absolute and mixed cell references in formulas .....	25
Excel functions.....	26
DATA USING FUNCTIONS.....	26
USING CONDITIONAL LOGIC FUNCTIONS .....	27
Using Formulas to Conditionally Summarize Data .....	28
USING FORMULAS TO MODIFY TEXT .....	29
CREATING CHARTS.....	30
EXCEL MACROS.....	32
MICROSOFT POWERPOINT .....	37
UNIT #1: INTRODUCTION.....	37
Unit #2: PRESENTATION BASICS .....	39
WORKING WITH TEXT.....	44
ADDING TABLES AND CHARTS IN A PRESENTATION .....	46
Inserting a Table .....	46
Inserting Excel Worksheet.....	46
Applying Table Styles.....	47
Inserting Chart .....	47
Resizing & Moving a Chart. ....	48
USING ANIMATION .....	49
Applying Transition Effects.....	49
Applying Animations.....	49
Using Motion Path Animation, .....	49
Modifying an Animation's Start Options and Timing .....	50
Setting Up a Slide Show .....	51
Using Presenter View .....	51
Creating interactive presentation using Zoom tool.....	52
MICROSOFT ACCESS.....	54
Introduction to Microsoft Access 2016.....	54
Creating a Database .....	54
Saving a Database .....	54
Opening an Existing Database. ....	54
CREATING TABLES .....	55
1. Creating a Table in Datasheet view .....	55
2. Saving a Table.....	55
3. Creating A Custom Table In Design View .....	55
4. Adding fields in a table .....	55
CREATING QUERIES .....	58
1. Creating a query from a table.....	58

---

UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE

2. Adding table to a query .....	58
3. Creating query from multiple tables .....	58
4. Adding criteria to a query. ....	58
CREATING FORMS .....	59
1. Creating a simple form.....	59
2. Creating a Form using Form Wizard .....	59
3. Creating a Form using Design View .....	59
4. Sorting data within a Form. ....	59
5. Filtering data within a Form. ....	59
1.. CREATING A SIMPLE REPORT .....	60
2. CREATING REPORT BY USING WIZARD .....	60

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## UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE

### UNIT #1: INTRODUCTION TO OFFICE AUTOMATION SOFTWARE

#### Q1. WHAT IS OPEN SOURCE SOFTWARE?

Ans: Open-source software (OSS) refers to computer software whose source code is made available to the public, allowing anyone to view, use, modify, and distribute the software freely.

**Examples:**

- Operating systems (e.g., Linux),
  - Web servers (e.g., Apache),
  - Programming languages (e.g., Python).
- 

#### Q2. WHAT IS PROPRIETARY SOFTWARE?

Ans: Proprietary software refers to software that is owned by a particular company or individual, and its source code is not made available to the public. This means that users cannot view, modify, or distribute the code, and they typically need to purchase a license to use the software legally.

**Examples:**

- Microsoft Windows
  - Microsoft Office Suite
  - Adobe Photoshop
  - Apple macOS
- 

#### Q3. WHAT IS MICROSOFT OFFICE SUITE 2016?

Ans: Microsoft Office Suite 2016 is a version of Microsoft Office, which is a collection of productivity software developed by Microsoft. Microsoft Office Suite 2016 was released on September 22, 2015. The Microsoft Office Suite 2016 includes various applications designed for different tasks, such as:

- Microsoft Word
  - Microsoft Excel
  - Microsoft PowerPoint
  - Microsoft Access
  - OneNote
  - Outlook
- 

#### Q4. EXPLAIN MS OFFICE APPLICATIONS' PRIMARY USER INTERFACE?

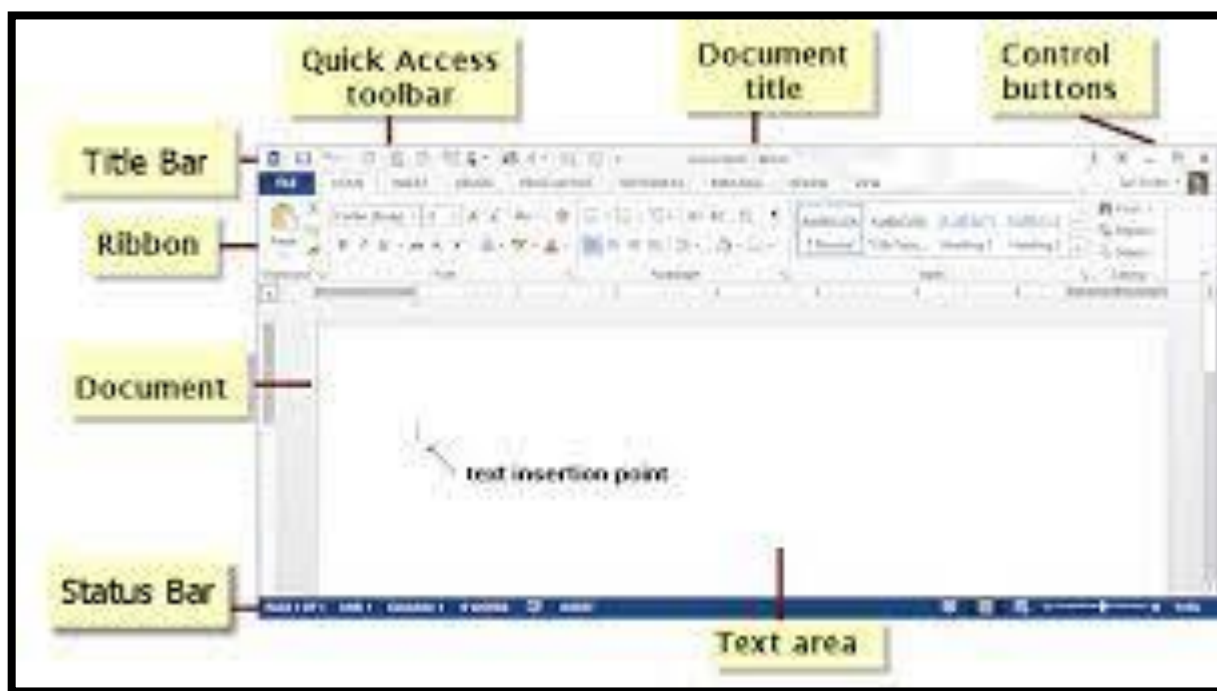
Ans:

1. **TITLE BAR:** the title bar is the topmost horizontal bar of the application window. It is a crucial component of the user interface as it provides essential information and controls for managing the application you are working on. The title bar typically contains the following elements:
  - File Name
  - Program Icon
  - Minimize, Maximize/Restore, and Close Buttons
2. **QUICK ACCESS TOOLBAR:** The Quick Access Toolbar (QAT) is a customizable toolbar that is a part of various software applications. It allows users to quickly access

## UNIT #2: MICROSOFT WORD

frequently used commands and features, providing a convenient way to enhance productivity.

3. **RIBBON:** In Microsoft Office, the term "ribbon" refers to the user interface element. The ribbon is a strip-like panel located at the top of most Office applications, such as Microsoft Word, Excel, PowerPoint, and others. It is designed to replace the traditional menu and toolbar system used in older versions of Office. The ribbon organizes commands into a series of tabs, and each tab contains groups of related commands.
4. **RIBBON COMMANDS/TABS:** Each tab on the ribbon represents a specific category or group of related commands. When you click on a particular tab, it displays a set of tools and options related to that category. The ribbon dynamically changes depending on the task or object selected, showing only relevant commands for the active context.
5. **DOCUMENT PAGE:** a white blank area where we can edit document. In MS-Word called document, in Excel called Book while in PowerPoint called Presentation.
6. **STATUS BAR:** In Microsoft Office applications, the status bar is a horizontal bar



typically located at the bottom of the window. It provides useful information and quick access to certain functions related to the document or application you are using.

## UNIT #2: MICROSOFT WORD

### Q5. EXPLAIN GENERAL FEATURES OF WORD PROCESSORS

Ans: A word processor is a computer application or software that allows users to create, edit, format, and manipulate text-based documents. These applications have become essential tools

## BASIC EDITING COMMANDS

for writing and editing various types of content, from simple letters and documents to complex reports and publications. The main features of a word processor typically include:

1. **Text Editing:** Word processors provide a user-friendly interface for entering, modifying, and deleting text.
2. **Formatting Options:** Word processors offer a wide range of formatting features to customize the appearance of text. Users can change font styles, sizes, colors, apply bold, italic, underline, and strike-through effects, adjust alignment (left, center, right, justified), and control line spacing.
3. **Page Layout:** Users can set up page size, margins, and orientation (portrait or landscape) for their documents.
4. **Headers and footers** can be added for consistent information on each page, and page numbering is often automated.
5. **Spelling and Grammar Check:** Word processors include built-in spell checkers to identify and highlight misspelled words. Additionally, they can perform grammar checks, offering suggestions for correcting sentence structure and punctuation errors.
6. **AutoCorrect:** This feature automatically corrects common typographical errors and can be customized by the user to include specific replacements.
7. **Find and Replace:** Word processors enable users to search for specific words or phrases within a document and replace them with other content if necessary.
8. **Tables:** Word processors offer tools to create and format tables, enabling users to organize data into rows and columns.
9. **Graphics and Media:** Users can insert images, illustrations, and other multimedia elements into their documents to enhance visual appeal and convey information effectively.
10. **Hyperlinks:** Word processors support hyperlinks, allowing users to add clickable links to web pages, email addresses, or other documents.
11. **Collaboration:** Many word processors offer collaboration features, enabling multiple users to work on the same document simultaneously, view changes in real-time, and leave comments for review.
12. **File Saving and Exporting:** Users can save their documents in various file formats like .docx, .pdf, .rtf, .txt, and more. This flexibility allows sharing documents with others who may not have the same word processor software.
13. **Printing:** Word processors allow users to print their documents, offering options to adjust print settings such as paper size and quality.

## BASIC EDITING COMMANDS

1. Creating a New Document,
2. Saving a Document for the First Time,
3. Saving Document in Different File Formats,
4. Creating a Document Using a Template,
5. Using Print Preview,
6. Printing a Document,

## BASIC EDITING COMMANDS

7. Opening an Existing Document,
8. Using Zoom,
9. Finding and Replacing Text,
10. Using AutoCorrect,

---

### COMMAND: CREATING A NEW DOCUMENT

Shortcut Key: Ctrl + N

Purpose: To start a new blank document

Steps:

1. Click File Tab
  2. Click New
  3. Click New Blank Document
- 

### COMMAND: SAVING A DOCUMENT FOR THE FIRST TIME.

Shortcut Key: F12

Purpose: To save the file for the first time we use Save As command.

Steps:

1. Click File Tab
  2. Click Save As option
  3. Type the filename and location – where we want to save file
  4. Click Save button
- 

### COMMAND: SAVING DOCUMENT IN DIFFERENT FILE FORMATS

Purpose: In Microsoft Word, you can save your documents in various file formats to make them compatible with different applications and platforms. Here's how you can save a document in different file formats:

1. **Save as DOCX (default format):**
  - Click on the "File" tab in the top left corner.
  - Select "Save As" from the menu on the left.
  - Choose a location where you want to save the file.
  - Enter a filename for your document.
  - From the "Save as type" drop-down menu, select "Word Document (\*.docx)".
  - Click "Save."
2. **Save as PDF:**
  - Click on the "File" tab in the top left corner.
  - Select "Save As" from the menu on the left.
  - Choose a location where you want to save the file.
  - Enter a filename for your document.
  - From the "Save as type" drop-down menu, select "PDF (\*.pdf)".
  - Click "Save."
3. **Save as DOC (Word 97-2003 format):**
  - Click on the "File" tab in the top left corner.
  - Select "Save As" from the menu on the left.
  - Choose a location where you want to save the file.
  - Enter a filename for your document.
  - From the "Save as type" drop-down menu, select "Word 97-2003 Document (\*.doc)".
  - Click "Save."

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### COMMAND: CREATING A DOCUMENT USING A TEMPLATE

Purpose: Creating a document using a template in Microsoft Word is a straightforward process. Word provides a variety of built-in templates for different types of documents, such as resumes, flyers, brochures, letters, and more. You can also find additional templates online or create your own.



## BASIC EDITING COMMANDS

- Open Microsoft Word on your computer.
- Select "New" to Create a New Document
- Browse or Search for a Template In the template gallery.
- Preview the Template Click on the template you want to use to preview it.
- Choose the Template Once you've found the template you like, click on it to select it. Then, click on the "Create" or "Download" button
- Edit the Template The selected template will now open as a new document. You can start editing the placeholders and content to customize the document according to your needs.
- Save Your Document Once you've made the necessary changes to the template and are satisfied with your document, save it to your preferred location on your computer.

---

### COMMAND: USING PRINT PREVIEW

**Shortcut Key:** Ctrl + P / Ctrl + F2

**Purpose:** Microsoft Word allows you to use the Print Preview feature to see how your document will look when printed, without actually printing it.

#### TO USE PRINT PREVIEW IN MICROSOFT WORD, FOLLOW THESE STEPS:

- Open your document in Microsoft Word.
- Click on the "File" tab in the top left corner of the window.
- In the File menu, click on "Print".
- The Print Preview screen will appear, showing you how your document will be formatted when printed. You can navigate through the pages using the arrow keys or scrollbar.
- If everything looks good in the Print Preview, you can click the "Print" button to print your document. If you need to go back to the regular editing view, click the "Close Print Preview" button or use the "Esc" key on your keyboard.

---

### COMMAND: TO PRINT A DOCUMENT

To print a document in Microsoft Word, follow these steps:

1. **Open the Document:** Open the document you want to print.
2. **Select Printer:** Make sure your printer is connected to your computer and turned on.  
**Choose Print Settings:** Below the printer selection, you can adjust various print settings such as the number of copies, page range, paper size, etc. Modify these settings according to your preferences.
3. **Print:** Once you've set the desired print options, click the "Print" button to start printing the document. Your document will be sent to the printer, and it should start printing.

---

### COMMAND: OPENING AN EXISTING DOCUMENT

**SHORTCUT: CTRL + O / CTRL + F12**

#### STEPS:

- Launch Microsoft Word on your computer.
- Click on the "File" tab located in the top-left corner of the Word window.
- In the File menu, select "Open." This will open the Open dialog box.
- Navigate to the location where the document is saved.
- Select the document you want to open, and then click on the "Open" button.

---

### COMMAND: USING ZOOM

In Microsoft Word, the zoom feature refers to the ability to change the magnification level of your document's content on the screen, making it larger or smaller to suit your preference. It helps you see more or less of the document at once.

- Use **Ctrl + -** to zoom out
  - Use **Ctrl + +** to zoom in
  - Use **Ctrl + 0** to return back to 100% zoom
  - Use **Ctrl + Scroll** to zoom in and out
-

## TEXT FORMATTING

### COMMAND: FINDING AND REPLACING TEXT

#### SHORTCUT KEYS:

FIND: CTRL + F

REPLACE: CTRL+ H

- Open your Microsoft Word document.
- Press "Ctrl + H" on your keyboard, or go to the "Home" tab in the Ribbon, and in the "Editing" group, click on "Replace."
- The "Find and Replace" dialog box will appear.
- In the "Find what" field, type the text you want to find.
- In the "Replace with" field, type the text you want to use as a replacement (optional).
- You can use additional options to customize your search:
  1. "Match Case": Check this box if you want the find operation to be case-sensitive.
  2. "Match Whole Words Only": Check this box if you want to find whole words only and not partial matches.
  3. "Sound Like": Check this box if you want to find whose sound is same.
- Click on "Find Next" to locate the first occurrence of the text you want to find. You can click "Find Next" again to continue searching for the next occurrence.
- If you want to replace the found text with your replacement text, you can click on "Replace" to replace the current occurrence. If you want to replace all occurrences, click on "Replace All."
- If you want to skip a particular occurrence, click "Find Next" to move to the next one without replacing the current one.
- When you are done, click "Close" to close the "Find and Replace" dialog box

### COMMAND: AUTOCORRECT

Microsoft Word, a popular word processing software, includes an autocorrect feature that automatically corrects common spelling and typing mistakes as you type. Autocorrect is designed to improve typing efficiency and accuracy by fixing minor errors without the need for manual intervention

Here's how autocorrect works in MS Word:

1. **Basic Autocorrect:** By default, Word will automatically correct common misspellings and certain capitalization errors as you type. For example, if you type "teh," Word will automatically change it to "the."
2. **Custom Autocorrect Entries:** Microsoft Word allows you to create custom autocorrect entries. You can add your own frequently misspelled words, abbreviations, or special characters that you want Word to automatically replace as you type.
  - To add a custom autocorrect entry, go to the "File" menu > "Options" > "Proofing."
  - In the Proofing options, click on the "AutoCorrect Options" button.
  - In the AutoCorrect dialog box, you can add new entries in the "Replace" and "With" fields, and then click "Add" and "OK" to save the changes.

## TEXT FORMATTING

1. Using the Font Group,
2. Using Format Painter,
3. Applying Styles,
4. Creating and Modifying WordArt,
5. Using the Clear Formatting Button.

### COMMAND: USING THE FONT GROUP

In Microsoft Word, the "Font" group refers to a set of tools and options that allow you to change the appearance of text in your document. The Font group can be found on the Home

## TEXT FORMATTING

tab of the Word ribbon, which is located at the top of the application window. Here's a brief overview of the tools available in the Font group:

1. **Font Family:** This drop-down list allows you to select the typeface or font you want to use for your text. Word offers a wide variety of fonts to choose from, ranging from traditional serif fonts like Times New Roman to modern sans-serif fonts like Arial.
2. **Font Size:** This drop-down list lets you set the size of your text. You can choose from predefined sizes or manually enter a custom size.
3. **Increase Font Size and Decrease Font Size:** These buttons allow you to quickly increase or decrease the font size of the selected text in small increments.
4. **Bold:** Clicking this button makes the selected text appear in a bold weight, which makes it thicker and more prominent.
5. **Italic:** Clicking this button slants the selected text to the right, giving it an italicized appearance.
6. **Underline:** This button underlines the selected text. You can click the dropdown arrow next to it to choose different types of underlines, such as single, double, and dotted lines.
7. **Strikethrough:** Clicking this button adds a horizontal line through the selected text, indicating that it is struck through.
8. **Subscript and Superscript:** These buttons allow you to format text as subscript (appears below the baseline) or superscript (appears above the baseline), respectively.
9. **Text Effects:** Clicking this button opens a menu that lets you apply various text effects, such as shadow, reflection, glow, and more.
10. **Text Highlight Color:** This button lets you apply a colored background to the selected text.
11. **Font Color:** This button allows you to change the color of the selected text.

---

### COMMAND: USING FORMAT PAINTER

Format Painter is a helpful feature in Microsoft Word that allows you to quickly copy the formatting (such as font style, size, color, paragraph spacing, etc.) from one section of the document and apply it to another section. This saves time and ensures consistency in the overall document appearance.

Here's how to use Format Painter in MS Word:

1. Open Microsoft Word and load the document you want to work on.
2. Select the text or paragraph that has the formatting you want to copy. It could be a single word, a sentence, a paragraph, or any other part of the document.
3. Look for the "Format Painter" button on the MS Word toolbar. It usually looks like a small paintbrush icon. In the "Home" tab of the ribbon.
4. Click on it. Your mouse cursor will now change to a paintbrush.
5. Highlight the text or paragraph where you want to apply the copied formatting. When you do this, you'll notice that the selected text takes on the formatting of the original text you copied.
6. To apply the formatting to multiple places, double-click the Format Painter button. This keeps the Format Painter "on," allowing you to apply the formatting to multiple locations. Once you're done, click the Format Painter button again or press the "Esc" key to turn off the Format Painter mode.

### COMMAND: APPLYING STYLES

Applying styles in Microsoft Word is a powerful way to quickly format your document and maintain consistency throughout your content. Styles help you define and apply a set of formatting characteristics to various elements in your document, such as headings, paragraphs, lists, etc. Here's how you can apply styles in MS Word:

1. **Open Microsoft Word:** Launch Microsoft Word and create a new document or open an existing one.

## TEXT FORMATTING

2. **View the Styles Pane:** In recent versions of Word (2013 and later), the Styles pane is usually displayed on the right-hand side of the window.
3. **Select Text to Apply Style:** Before you apply a style, select the text you want to format. For instance, if you want to apply a style to a heading, highlight the heading text.
4. **Apply a Style:** In the Styles pane, you'll see a list of available styles. Move your mouse over a style to see a preview of how it will look in your document. To apply a style, simply click on the style name. The selected text will be instantly formatted according to the style's settings.

### COMMAND: CREATING AND MODIFYING WORDART

WordArt is a feature available in Microsoft Word and other Microsoft Office applications that allows you to create stylized text with various effects, such as shadows, gradients, and 3D perspectives. To create and modify WordArt, follow these steps:

#### **Creating WordArt:**

1. Open Microsoft Word
2. Go to the "Insert" tab.
3. Look for the "WordArt" button in the "Text" group.
4. Click on the "WordArt" button, and a gallery of WordArt styles will appear.
5. Choose a WordArt style that you like. Click on it to insert a default WordArt box in your document.

### COMMAND: USING THE CLEAR FORMATTING BUTTON

To use the clear formatting button in various applications, such as Microsoft Word follow these general steps:

1. Highlight the text: First, select the text from which you want to remove the formatting. You can click and drag your mouse over the desired text or use keyboard shortcuts like Ctrl + A
2. Locate the clear formatting button: The clear formatting button is usually represented by an eraser icon or labeled as "Clear Formatting" or "Remove Formatting." Or Press Ctrl + Spacebar

## PARAGRAPH FORMATTING

### PARAGRAPH FORMATTING

1. Formatting Paragraph,
2. Setting Indents (First Line, Hanging, Left, Right),
3. Setting Line Spacing,
4. Setting Paragraph Spacing,
5. Creating a Bulleted List, Creating a Numbered List.

#### COMMAND: WHAT IS PARAGRAPH FORMATTING?

Purpose: Paragraph formatting refers to the process of adjusting the appearance and layout of a paragraph of text in a document to improve its readability and visual appeal. It involves making changes to various aspects of the paragraph, such as alignment, indentation, spacing, font style, and more

#### COMMAND: SETTING INDENTS (FIRST LINE, HANGING, LEFT, RIGHT)

1. **First Line Indent:** The first line indent sets the amount of space indented from the left margin for the first line of a paragraph. This is commonly used for the first line of a paragraph to make it stand out and improve the document's readability.

To set a first line indent:

- Select the paragraph or place the cursor within the paragraph.
  - Go to the "Home" tab in Microsoft Word.
  - In the "Paragraph" group, find the "First Line Indent" option (it looks like two triangles pointing in opposite directions).
  - Click on the small arrow next to the "First Line Indent" icon to open the "First Line Indent" menu.
  - You can choose preset options like "0.5", "1.27 cm", etc., or click on "Custom..." to specify a custom indent value.
2. **Hanging Indent:** The hanging indent sets the amount of space indented from the left margin for all lines in a paragraph except the first line. This is commonly used in bulleted or numbered lists, where the first line is flush with the left margin, and the subsequent lines are indented.

To set a hanging indent:

- Select the paragraph or place the cursor within the paragraph.
  - Go to the "Home" tab in Microsoft Word.
  - In the "Paragraph" group, find the "Hanging Indent" option (it looks like two triangles pointing down).
  - Click on the small arrow next to the "Hanging Indent" icon to open the "Hanging Indent" menu.
  - You can choose preset options like "0.5", "1.27 cm", etc., or click on "Custom..." to specify a custom indent value.
3. **Left Indent:** The left indent sets the amount of space from the left margin to the left edge of the paragraph. It indents the entire paragraph by the specified amount.

To set a left indent:

- Select the paragraph or place the cursor within the paragraph.
  - Go to the "Home" tab in Microsoft Word.
  - In the "Paragraph" group, find the "Increase Indent" and "Decrease Indent" icons to adjust the left indent in predefined steps. Alternatively, click on the small arrow next to the "Increase Indent" icon to open the "Indent" menu and set a custom left indent value.
4. **Right Indent:** The right indent sets the amount of space from the right margin to the right edge of the paragraph. It indents the entire paragraph by the specified amount from the right side.

---

## PARAGRAPH FORMATTING

To set a right indent:

- Select the paragraph or place the cursor within the paragraph.
- Go to the "Home" tab in Microsoft Word.
- In the "Paragraph" group, click on the small arrow next to the "Increase Indent" icon to open the "Indent" menu.
- Set a positive value in the "Right" box to apply a right indent.

By using these indent options, you can effectively format and structure your paragraphs to make your document look professional and well-organized.

---

## COMMAND: SETTING LINE SPACING

Setting line spacing is essential for controlling the vertical space between lines in a paragraph or a portion of text. It helps improve readability and overall appearance. In Microsoft Word, you can adjust line spacing using various preset options or customize it to your preference. Here's how to set line spacing:

1. **Select the Text:** Highlight the paragraph or text you want to adjust the line spacing for. If you want to change the line spacing for the entire document, press "Ctrl+A" to select all text.
  2. **Using Preset Line Spacing Options:**
    - Go to the "Home" tab in Microsoft Word.
    - In the "Paragraph" group, find the "Line Spacing" icon. It usually displays the current line spacing value (e.g., "1.0", "1.15", "1.5", "2.0", etc.).
    - Click the arrow next to the "Line Spacing" icon to open the drop-down menu.
    - Select one of the preset line spacing options, such as "Single," "1.5 Lines," "Double," "At least," or "Exactly."
  3. **Custom Line Spacing:**
    - To set a specific line spacing value, select "Line Spacing Options" from the "Line Spacing" drop-down menu mentioned earlier.
    - The "Paragraph" dialog box will appear with various options.
    - In the "Spacing" section, you can customize the line spacing by adjusting the values for "Before" and "After." These values set the spacing above and below the paragraph.
    - Under "Line spacing," choose "Single," "1.5," "Double," or enter a specific value in the box next to "At."
  4. **Setting Line Spacing for the Whole Document:**
    - To change the line spacing for the entire document, place the cursor anywhere within the document (or press "Ctrl+A" to select all text).
    - Go to the "Home" tab, open the "Line Spacing" drop-down menu, and select the desired line spacing option.
- 

## SETTING PARAGRAPH SPACING

Setting paragraph spacing allows you to control the amount of space above and below each paragraph in a document. Adjusting paragraph spacing can help improve the document's overall layout and readability. In Microsoft Word, you can set paragraph spacing using both preset options and custom spacing. Here's how to do it:

1. **Select the Paragraphs:** You can apply paragraph spacing to individual paragraphs or multiple paragraphs. To select a single paragraph, click anywhere inside the paragraph. To select multiple paragraphs, click and drag to highlight the paragraphs you want to format. To apply the spacing to the entire document, press "Ctrl+A" to select all text.
2. **Using Preset Paragraph Spacing Options:**



## PARAGRAPH FORMATTING

- Go to the "Home" tab in Microsoft Word.
  - In the "Paragraph" group, you will find the "Line Spacing" icon. It might display the current line spacing value.
  - Click on the small arrow next to the "Line Spacing" icon to open the drop-down menu.
  - Choose one of the preset paragraph spacing options, such as "Single," "1.5 Lines," "Double," "At least," or "Exactly."
3. **Custom Paragraph Spacing:**
    - To set custom paragraph spacing, select "Line Spacing Options" from the "Line Spacing" drop-down menu mentioned earlier.
    - The "Paragraph" dialog box will appear with various options.
    - In the "Spacing" section, you can customize the paragraph spacing by adjusting the values for "Before" and "After." These values set the spacing above and below the paragraph.
    - You can also set the "Line spacing" option to "Single," "1.5," "Double," or enter a specific value in the box next to "At."
  4. **Setting Paragraph Spacing for the Whole Document:**
    - To change paragraph spacing for the entire document, place the cursor anywhere within the document (or press "Ctrl+A" to select all text).
    - Go to the "Home" tab, open the "Line Spacing" drop-down menu, and select the desired paragraph spacing option.

### Command: Creating a Bulleted List, Creating a Numbered List

In Microsoft Word, you can create both bulleted and numbered lists to organize and present information in a clear and structured manner. Here's how to create each type of list:

#### Creating a Bulleted List:

1. **Select the Text:** Type the text you want to include in the bulleted list, or select the existing text you want to convert into a bulleted list.
2. **Bulleted List Button:** Go to the "Home" tab in Microsoft Word.
3. **Bulleted List Icon:** In the "Paragraph" group, find the "Bulleted List" icon. It looks like three bullet points.
4. **Click the Icon:** Click on the "Bulleted List" icon. This will convert the selected text into a bulleted list, with each item preceded by a bullet point.
5. **Adding Items to the List:** Press "Enter" after each item to create a new bullet point and continue adding items to the list.
6. **Changing Bullet Style:** If you want to change the bullet style, click the small arrow next to the "Bulleted List" icon. From the drop-down menu, you can choose from different bullet styles.

#### Creating a Numbered List:

1. **Select the Text:** Type the text you want to include in the numbered list, or select the existing text you want to convert into a numbered list.
2. **Numbered List Button:** Go to the "Home" tab in Microsoft Word.
3. **Numbered List Icon:** In the "Paragraph" group, find the "Numbered List" icon. It looks like three numbers (1, 2, 3).
4. **Click the Icon:** Click on the "Numbered List" icon. This will convert the selected text into a numbered list, with each item numbered sequentially.
5. **Adding Items to the List:** Press "Enter" after each item to create a new numbered item and continue adding items to the list.
6. **Changing Numbering Style:** If you want to change the numbering style, click the small arrow next to the "Numbered List" icon. From the drop-down menu, you can choose from different numbering styles.

## PAGE FORMATTING & PRINTING

1. The Page Layout Tab,
2. Setting Margins,
3. Selecting Page Orientation,
4. Choosing Paper Size,
5. Number of Columns setting,
6. Page & Section Breaks.
7. Selection of Printer,
8. Print Settings.

**Setting Margins:** Setting margins in a word processing document determines the amount of space between the content and the edges of the paper. Margins are important for formatting the layout of your document and ensuring that the text is readable and presentable. In Microsoft Word, you can easily adjust the margins using the following steps:

1. **Open the Page Setup Dialog:**
    - Go to the "Layout" or "Page Layout" tab in Microsoft Word (depending on your Word version).
    - Look for the "Margins" option in the "Page Setup" group.
  2. **Select a Preset Margin Setting:**
    - In the "Margins" option, you'll find several predefined margin settings such as "Normal," "Narrow," "Wide," "Moderate," etc.
    - Click on the preset margin setting that best suits your document's requirements.
  3. **Custom Margins:**
    - If you need to set custom margins, click on the "Custom Margins" option at the bottom of the predefined margin settings.
    - The "Page Setup" dialog box will open.
  4. **Adjust Margins:**
    - In the "Page Setup" dialog box, go to the "Margins" tab.
    - You can set the margins for the top, bottom, left, and right sides of the page using the text boxes or the up/down arrows to adjust the values.
    - Ensure that you maintain a reasonable margin size to leave enough white space around the content.
  5. **Apply to:** Choose whether to apply the margin settings to the "Whole document" or "This section" (if you have multiple sections in your document).
  6. **Gutter:** The "Gutter" is the space added to the margin to leave room for binding. This option is particularly useful when you plan to print the document as a booklet or for double-sided printing. You can set a gutter value in the "Page Setup" dialog box as well.
  7. **Mirror Margins:** This option is used when you're working on a document meant for double-sided printing, such as a book. It allows you to set different margins for odd and even pages to accommodate the binding.
  8. **Default Margins for New Documents:** If you want to set the chosen margins as the default for all new documents, click the "Set As Default" button in the "Page Setup" dialog box.
  9. **Preview:** The preview section of the "Page Setup" dialog box shows how your margins will look on the page.
  10. **Apply the Changes:** Once you've set the desired margins, click the "OK" button to apply the changes to your document.
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## PAGE FORMATTING & PRINTING

### Selecting page orientation

Selecting the page orientation in a word processing document determines whether the content is laid out in a portrait or landscape format. The two main page orientations are:

1. **Portrait Orientation:** In portrait orientation, the page is taller than it is wide. This is the default orientation for most documents, including letters, essays, and standard reports.
2. **Landscape Orientation:** In landscape orientation, the page is wider than it is tall. This format is ideal for displaying content that is better suited to a horizontal layout, such as tables, charts, large images, or wide columns of text.

Here's how to select the page orientation in Microsoft Word:

1. **Open the Page Setup Dialog:**
  - Go to the "Layout" or "Page Layout" tab in Microsoft Word (depending on your Word version).
  - Look for the "Orientation" option in the "Page Setup" group.
2. **Select Page Orientation:**
  - Click on the "Orientation" option to open the drop-down menu.
  - Choose either "Portrait" or "Landscape" from the options provided.
3. **Apply to:** Select whether you want to apply the chosen orientation to the "Whole document" or "This section" (if your document has multiple sections).
4. **Preview:** The preview section of the "Page Setup" dialog box shows how the selected orientation will affect the page layout.
5. **Apply the Changes:** Once you've selected the desired page orientation, click the "OK" button to apply the changes to your document.

### Choosing paper size,

Choosing the appropriate paper size in a word processing document is essential to ensure that the content fits well on the printed page. Different regions and document types often have specific standard paper sizes. In Microsoft Word, you can easily select the paper size to match your requirements. Here's how to do it:

1. **Open the Page Setup Dialog:**
    - Go to the "Layout" or "Page Layout" tab in Microsoft Word (depending on your Word version).
    - Look for the "Size" option in the "Page Setup" group.
  2. **Select Paper Size:**
    - Click on the "Size" option to open the drop-down menu.
    - Choose the desired paper size from the list of options. Common paper sizes include "Letter" (8.5" x 11"), "Legal" (8.5" x 14"), "A4" (8.27" x 11.69"), and more.
  3. **Custom Paper Size:**
    - If your required paper size is not listed in the standard options, you can choose "More Paper Sizes" or "Custom Size."
    - The "Page Setup" dialog box will appear, allowing you to specify a custom width and height for your paper.
  4. **Apply to:** Select whether you want to apply the chosen paper size to the "Whole document" or "This section" (if your document has multiple sections).
  5. **Preview:** The preview section of the "Page Setup" dialog box shows how the selected paper size will affect the page layout.
  6. **Apply the Changes:** Once you've selected the desired paper size, click the "OK" button to apply the changes to your document.
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## PAGE FORMATTING & PRINTING

### Number of Columns setting

The "Number of Columns" setting in a word processing document allows you to divide the text into multiple columns, similar to a newspaper or magazine layout. This feature is useful when you want to create a multi-column document, newsletter, brochure, or any content that benefits from a compact and visually appealing presentation. Microsoft Word provides a straightforward way to set the number of columns in your document. Here's how:

1. **Select the Text:** Type or select the text you want to format into columns. If you want to apply the column setting to the entire document, press "Ctrl+A" to select all text.
2. **Open the Columns Dialog:**
  - Go to the "Layout" or "Page Layout" tab in Microsoft Word (depending on your Word version).
  - Look for the "Columns" option in the "Page Setup" or "Page Setup" group.
3. **Select the Number of Columns:**
  - Click on the "Columns" option to open the drop-down menu.
  - Choose the number of columns you want to divide your text into. Common options include one column (single-column layout), two columns, or more.
4. **Custom Column Settings:**
  - If you need a specific column layout that is not available in the standard options, choose "More Columns" from the drop-down menu.
  - The "Columns" dialog box will appear, allowing you to specify a custom number of columns, column width, spacing between columns, and whether to apply the column setting to the entire document or a selected section.
5. **Preview:** The preview section of the "Columns" dialog box shows how the selected number of columns will affect the layout of your text.
6. **Apply the Changes:** Once you've selected the desired number of columns and adjusted any custom settings, click the "OK" button to apply the changes to your document.

### Page & Section Breaks.

**Page Break:** A page break is used to force the content following the break onto a new page. It's useful when you want to start a new page for a new section, chapter, or any other content division. By inserting a page break, you ensure that the content after the break starts at the top of the new page.

To insert a page break in Microsoft Word:

- Place the cursor at the end of the content that you want to appear on the current page.
- Go to the "Insert" tab in Microsoft Word.
- In the "Pages" group, click on the "Page Break" button (it looks like a dashed line).
- Alternatively, you can use the keyboard shortcut "Ctrl + Enter" to insert a page break.

**Section Break:** A section break is more versatile than a page break, as it allows you to change the formatting and layout of different sections within a document. Each section can have its own page orientation, margins, headers, footers, and other settings.

To insert a section break in Microsoft Word:

- Place the cursor at the location where you want to start a new section.
- Go to the "Layout" or "Page Layout" tab in Microsoft Word.
- In the "Page Setup" group, click on the "Breaks" button.
- From the drop-down menu, choose the type of section break you want to insert:
  - "Next Page": Starts a new section on the next page with its own formatting settings.
  - "Continuous": Starts a new section on the same page without creating a page break. Useful for adjusting formatting within the same page.
  - "Even Page" or "Odd Page": Starts a new section on the next even-numbered or odd-numbered page, respectively. Useful for creating two-sided documents with different formatting on each side.

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## PAGE FORMATTING & PRINTING

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### Selection of Printer,

When selecting a printer within Microsoft Word, you can choose the printer you want to use to print your document. Here's how to do it:

1. **Open Your Document:** Open the document you want to print in Microsoft Word.
2. **Go to Print Settings:** Click on the "File" tab in the top left corner of the Word window.
3. **Print Options:** In the left sidebar, click on "Print" to access the print options.
4. **Select Printer:** In the "Printer" section, you will see a drop-down menu that shows the currently selected printer. Click on the drop-down arrow to see the list of available printers installed on your computer.
5. **Choose Printer:** From the list of available printers, select the printer you want to use to print your document.
6. **Print:** Once you have selected the desired printer and adjusted the settings if needed, click the "Print" button to start printing your document.

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### Print settings

In Microsoft Word, the Print Settings allow you to customize various options before printing your document. These settings enable you to control the appearance and layout of the printed output. Here's how to access and use the Print Settings in Word:

1. **Open Your Document:** Open the document you want to print in Microsoft Word.
2. **Go to Print Settings:** Click on the "File" tab in the top left corner of the Word window.
3. **Print Options:** In the left sidebar, click on "Print" to access the print options.
4. **Print Settings Overview:** In the "Print" section, you'll find several settings that you can customize:
  - **Printer:** Choose the printer you want to use for printing your document. This is the same option discussed in the previous answer.
  - **Print Range:** Specify the range of pages you want to print. You can choose to print the entire document, a specific page, a selection of pages, or a range of pages.
  - **Copies:** Set the number of copies you want to print.
  - **Collate:** If you are printing multiple copies, you can choose whether to collate them (group the pages together) or not.
  - **Orientation:** Select whether you want the document to be printed in portrait (vertical) or landscape (horizontal) orientation.
  - **Paper Size:** Choose the paper size for printing. Common options include Letter, A4, Legal, etc. Make sure it matches the paper size loaded in your printer.
  - **Margins:** Adjust the margins for printing. You can set the margins to Normal, Narrow, Wide, or choose to use custom margins.
  - **Page Scaling:** Scale the document to fit the paper size, or you can choose actual size if you want to maintain the original document size.
  - **Print on Both Sides:** If your printer supports duplex printing (double-sided), you can choose to print on both sides of the paper.
  - **Print One Sided:** If your printer has duplex capabilities but you want to print on one side only, select this option.
5. **Preview:** After customizing the print settings, you can view a preview of how the printed document will look.
6. **Print:** Once you have adjusted the desired print settings and previewed the document, click the "Print" button to start printing your document.

## CREATING TABLES

### CREATING TABLES

#### INTRODUCTION:

A **table** is a grid of cells arranged in **rows** and **columns**. Tables can be used to organize any type of content, whether you're working with text or numerical data. In Word, you can quickly insert a **blank table** or convert **existing text** to a table. You can also customize your table using different **styles** and **layouts**.

#### To insert a blank table:

1. Place the insertion point where you want the table to appear.
2. Navigate to the Insert tab, then click the Table command.
3. This will open a drop-down menu that contains a grid. Hover over the grid to select the number of columns and rows you want.
4. Click the grid to confirm your selection, and a table will appear.
5. To enter text, place the insertion point in any cell, then begin typing.

#### To convert existing text to a table:

1. Select the text you want to convert to a table.
2. Go to the Insert tab, then click the Table command.
3. Select Convert Text to Table from the drop-down menu.
4. Choosing convert to table
5. Click OK. The text will appear in a table.

### MODIFYING TABLES

You can easily change the appearance of your table once you've added one to your document. There are several options for customization, including **adding rows or columns** and changing the **table style**.

#### To add a row or column:

1. Hover outside the table where you want to add a row or column.
2. Click the plus sign that appears.
3. A new row or column will be added to the table.
4. You can also right-click the table, then hover over Insert to see various row and column options.

#### To delete a row or column:

1. Place the insertion point in the row or column you want to delete.
2. Right-click, then select Delete Cells from the menu.
3. A dialog box will appear. Choose Delete entire row or Delete entire column, then click OK.
4. The row or column will be deleted.

#### TO APPLY A TABLE STYLE:

Table styles let you change the look and feel of your table instantly. They control several design elements, including color, borders, and fonts.

1. Click anywhere in your table to select it, then click the Design tab on the far right of the Ribbon.
2. Locate the Table Styles group, then click the More drop-down arrow to see the full list of styles.
3. Select the table style you want.
4. The table style will appear.

#### To modify table style options:

Once you've chosen a table style, you can turn various options on or off to change its appearance. There are six options: Header Row, Total Row, Banded Rows, First Column, Last Column, and Banded Columns.

1. Click anywhere in your table, then navigate to the Design tab.

## URDU LANGUAGE SETTING AND TYPING

2. Locate the Table Style Options group, then check or uncheck the desired options.
3. The table style will be modified.

### To apply borders to a table:

1. Select the cells you want to apply a border to.
2. Use the commands on the Design tab to choose the desired Line Style, Line Weight, and Pen Color.
3. Click the drop-down arrow below the Borders command.
4. Choose a border type from the menu.
5. The border will be applied to the selected cells.

## MODIFYING A TABLE USING THE LAYOUT TAB

In Word, the Layout tab appears whenever you select your table. You can use the options on this tab to make a variety of modifications.

### Rows and Columns

Use these commands to quickly insert or delete rows and columns. This can be especially useful if you need to add something to the middle of your table.

### Merge and Split Cells

Some tables require a layout that doesn't conform to the standard grid. In these cases, you may want to merge multiple cells (i.e., combine them into one) or split a cell in two.

### Change Cell Size

You can manually enter a desired row height or column width for your cells. You can also use the AutoFit command, which will automatically adjust the column widths based on the text inside.

### Distribute Rows/Columns

To keep your table looking neat and organized, you may want to distribute your rows or columns equally. This will make them all the same size. You can apply this feature to the entire table or just a small portion of it.

### Align Cell Text

By changing the alignment of your cells, you can control exactly where the text is located. In the example below, the text has been aligned to the center.

### Change Text Direction

You can easily change the direction of your text from horizontal to vertical. Making your text vertical can add style to your table; it also allows you to fit more columns in your table.

## USE OF FORMULA IN A TABLE CELL

You can perform calculations and logical comparisons in a table by using formulas. The Formula command is found on the Table Tools, Layout tab, in the Data group.

### Insert a formula in a table cell

1. Select the table cell where you want your result. If the cell is not empty, delete its contents.
2. On the Table Tools, Layout tab, in the Data group, click Formula.
3. Use the Formula dialog box to create your formula. You can type in the Formula box, select a number format from the Number Format list.

## URDU LANGUAGE SETTING AND TYPING

### How to Change the Language Settings to Urdu on Your Computer

1. Go to "Settings" > "Time & Language" > "Language."
2. Click on "Add a Language" and select "Urdu." This will add it to your list of languages
3. Click on اردو > "Options" > "Download." It'll take a few minutes to download and install the language pack.

## MICROSOFT EXCEL

## MICROSOFT EXCEL

## General Features of Spreadsheets

## SCREEN LAYOUTS OF MS-EXCEL

1. **Ribbon:** The Ribbon is a tabbed toolbar at the top of the Excel window. It contains tabs such as Home, Insert, Page Layout, Formulas, Data, Review, and View. Each tab has related commands organized into groups.
2. **Quick Access Toolbar:** Located above the Ribbon, this toolbar allows users to customize and access frequently used commands, such as Save, Undo, and Redo.
3. **Worksheet Area:** The large area in the middle of the Excel window is the worksheet area. It consists of columns (labeled A, B, C, ...) and rows (labeled 1, 2, 3, ...), forming cells where you can enter and manipulate data.
4. **Column and Row Headers:** The letters at the top of the columns and numbers on the left side of the rows serve as headers to identify specific columns and rows.
5. **Formula Bar:** The Formula Bar, located above the worksheet, displays the contents of the active cell and allows you to enter or edit data and formulas.
6. **Name Box:** This is a small box to the left of the Formula Bar that displays the address or name of the active cell.
7. **Cell:** The intersection of a row and a column is called a cell. You can click on a cell to select it, enter data, or perform various operations.
8. **Sheet Tabs:** At the bottom of the Excel window, you'll find sheet tabs that allow you to switch between different worksheets in the same workbook.
9. **Status Bar:** The Status Bar, located at the bottom of the Excel window, provides information about the current status of the workbook, such as the sum, average, and count of selected cells.
10. **Zoom Slider:** In the bottom-right corner, there is a zoom slider that allows you to zoom in or out to adjust the view of the worksheet.
11. **View Options:** The View options on the right side of the status bar allow you to switch between different views, such as Normal, Page Layout, and Page Break Preview.
12. **Collapse/Expand Ribbon:** You can minimize or expand the Ribbon by clicking the small arrow icon at the right end of the Ribbon.



## WORKING WITH EXCEL

## WORKING WITH EXCEL

## 1. Creating a new workbook

**Method 1: Using the Ribbon**

1. Open Microsoft Excel on your computer.
2. In the Ribbon at the top of the Excel window, go to the "File" tab.
3. Click on "New." This will open a panel on the right side.
4. In the panel, click on "Blank Workbook." This option creates a new workbook with a blank worksheet.

**Method 2: Keyboard Shortcut**

1. Open Microsoft Excel on your computer.
2. Use the keyboard shortcut **Ctrl + N** (Windows) or **Command + N** (Mac) to create a new workbook.

**Method 3: Right-Click on Excel Icon**

1. Locate the Microsoft Excel icon on your desktop or in the Start menu.
2. Right-click on the icon.
3. From the context menu, choose "Microsoft Excel" to open a new, blank workbook.

## 2. Opening an existing workbook

1. Click the File tab.
2. Click Open. Press **Ctrl + O** to quickly display the Open tab of the Backstage view.
3. Select the location where the file is saved. You can choose from: Recent: Recent files you've worked on. ...
4. Select the file you want to open.
5. Click Open.

## 3. Entering basic data

**a. Enter text or a number in a cell**

1. On the worksheet, click a cell.
2. Type the numbers or text that you want to enter, and then press **ENTER** or **TAB**.
3. To enter data on a new line within a cell, enter a line break by pressing **ALT+ENTER**.

**b. Enter date or a time in a cell**


1. On the worksheet, click a cell.
2. Type a date or time as follows:
  - To enter a date, use a slash mark or a hyphen to separate the parts of a date; for example, type **9/5/2002** or **5-Sep-2002**.
  - To enter a time that is based on the 12-hour clock, enter the time followed by a space, and then type **a** or **p** after the time; for example, **9:00 p**. Otherwise, Excel enters the time as AM.

To enter the current date and time, press **Ctrl+Shift+;** (semicolon).

**c. Enter the same data into several cells at the same time**

1. Select the cells into which you want to enter the same data. The cells do not have to be adjacent.
2. In the active cell, type the data, and then press **Ctrl+Enter**.

## 4. Deleting and Clearing Cell Contents

1. Select the cells, rows, or columns that you want to clear.
2. On the **Home** tab, in the **Editing** group, click the arrow next to the **Clear** button , and then do one of the following:
  - To clear all contents, formats, and comments that are contained in the selected cells, click **Clear All**.
  - To clear only the formats that are applied to the selected cells, click **Clear Formats**.

## FORMATTING CELLS AND WORKSHEETS

- To clear only the contents in the selected cells, leaving any formats and comments in place, click **Clear Contents**.
- To clear any comments or notes that are attached to the selected cells, click **Clear Comments and Notes**.
- To clear any hyperlinks that are attached to the selected cells, select **Clear Hyperlinks**.

### 5. Cutting, Copying and Pasting Data

#### Move cells by drag and dropping

1. Select the cells or range of cells that you want to move or copy.
2. Point to the border of the selection.
3. When the pointer becomes a move pointer, drag the cell or range of cells to another location.

#### Move cells by using Cut and Paste

1. Select a cell or a cell range.
2. Select **Home > Cut** or press Ctrl + X.
3. Select a cell where you want to move the data.
4. Select **Home > Paste** or press Ctrl + V.

#### Copy cells by using Copy and Paste

1. Select the cell or range of cells.
2. Select **Copy** or press Ctrl + C.
3. Select **Paste** or press Ctrl + V.

## FORMATTING CELLS AND WORKSHEETS

### Inserting and deleting cells

#### Insert or delete a column

1. Select any cell within the column, then go to **Home > Insert > Insert Sheet Columns** or **Delete Sheet Columns**.
2. Alternatively, right-click the top of the column, and then select **Insert** or **Delete**.

#### Insert or delete a row

1. Select any cell within the row, then go to **Home > Insert > Insert Sheet Rows** or **Delete Sheet Rows**.
2. Alternatively, right-click the row number, and then select **Insert** or **Delete**.

### Merge and unmerge cells

#### Merge cells

1. Select the cells to merge.
2. Select **Merge & Center**.

#### Unmerge cells

1. Select the Merge & Center down arrow.
2. Select Unmerge Cells.

### Format cells by using format painter

1. Select the cell with the formatting you want to copy.
2. Select **Home > Format Painter**.
3. Drag to select the cell or range you want to apply the formatting to.
4. Release the mouse button and the formatting should now be applied.

### Insert headers and footers

1. Go to **Insert > Header** or **Footer**.
2. Choose the header style you want to use.
3. Add or change text for the header or footer. To edit a header or footer that's been already created, double-click on it.
4. To eliminate a header--like deleting it on the title page--select it and then check the Different First Page box.



## USING FORMULAS AND FUNCTIONS

5. Select Close Header and Footer or press Esc to exit.
6. To delete, select Insert > Header (or Footer) > Remove Header (or Remove Footer).

### Add a worksheet to an existing workbook

#### Insert a worksheet

- Select the **New Sheet** plus icon  at the bottom of the workbook.
- Or, select **Home > Insert > Insert Sheet**.

#### Rename a worksheet

- Double-click the sheet name on the **Sheet** tab to quickly rename it.
- Or, right-click on the **Sheet** tab, click **Rename**, and type a new name.

#### Move a worksheet

- To move the tab to the end, right-click the **Sheet** tab then **Move or Copy > (move to end) > OK**.
- Or, click and drag to tab to any spot.

#### Delete a worksheet

- Right-click the **Sheet** tab and select **Delete**.
- Or, select the sheet, and then select **Home > Delete > Delete Sheet**.

### Change magnification by using zoom tools.

Change the Magnifier zoom level with a keyboard

- To increase the Magnifier zoom level, press the **Windows logo key + Plus sign (+)**
- To decrease the Magnifier zoom level, press the **Windows logo key + Minus sign (-)**

## USING FORMULAS AND FUNCTIONS

### Using absolute and mixed cell references in formulas

#### 1. Relative Cell Reference:

- When you use a relative cell reference in a formula, it adjusts itself when you copy the formula to another cell. The reference is relative to the position of the formula cell.
- Example: If you have a formula in cell B2 as =A1, and you copy this formula to cell B3, it will automatically adjust to =A2.

#### 2. Absolute Cell Reference:

- An absolute cell reference does not change when you copy the formula to another cell. It remains fixed on a specific cell, regardless of where the formula is located.
- In Excel, you denote an absolute reference by placing a dollar sign (\$) before the column letter and row number. For example, if you have a formula in cell B2 as =\$A\$1, copying it to cell B3 will still refer to cell A1.

#### 3. Mixed Cell Reference:

- A mixed cell reference is a combination of relative and absolute references. You can have an absolute column or row while keeping the other part relative, or vice versa.

Example:

- \$A1 - The column reference is absolute, but the row reference is relative. If you copy this formula to another column, the column reference remains fixed, but the row reference adjusts.
- A\$1 - The row reference is absolute, but the column reference is relative. If you copy this formula to another row, the row reference remains fixed, but the column reference adjusts.

## USING FORMULAS AND FUNCTIONS

### Excel functions

#### DATA USING FUNCTIONS

1. **SUM:** In Microsoft Excel, the **SUM** function is used to add up a range of numbers in a worksheet. It's one of the most commonly used functions and is quite versatile. Here is the basic syntax of the **SUM** function:

**Syntax:** =SUM(number1, [number2], ...)

- **number1:** This is the first number or range that you want to add.
- **number2, ...:** These are additional numbers or ranges that you want to include in the sum. You can include up to 255 individual numbers or ranges.

**Examples:**

- i. To sum a range of numbers:

=SUM(A1:A5)

- ii. To sum multiple ranges:

=SUM(A1:A5, C1:C5, E1:E5)

- iii. To sum individual numbers:

=SUM(10, 20, 30, 40)

2. **COUNT:** In Excel, the **COUNT** function is used to count the number of cells in a range that contains numbers. It does not count empty cells or cells that contain text, errors, or non-numeric values. The basic syntax of the **COUNT** function is as follows:

**Syntax:** =COUNT(value1, [value2], ...)

- **value1:** This is the first value or range of values that you want to count.
- **[value2], ...:** These are optional additional values or ranges that you want to include in the count.

**Examples:**

- i. =COUNT(A1:A10)

This formula counts the number of cells in the range A1 to A10 that contain numeric values.

- ii. =COUNT(A1:A10, B1:B10, C1)

This formula counts the number of numeric cells in ranges A1:A10, B1:B10, and cell C1.

3. **COUNTA:** In Excel, the **COUNTA** function is used to count the number of cells in a range that are not empty. It counts cells that contain any type of data, including numbers, text, errors, and logical values. The basic syntax of the **COUNTA** function is as follows:

**Syntax:** =COUNTA(value1, [value2], ...)

- **value1:** This is the first value or range of values that you want to count.
- **[value2], ...:** These are optional additional values or ranges that you want to include in the count.

**Examples:**

- i. =COUNTA(A1:A10)

This formula counts the number of non-empty cells in the range A1 to A10

- ii. =COUNTA(A1:A10, B1:B10, C1)

This formula counts the number of non-empty cells in ranges A1:A10, B1:B10, and cell C1.

4. **COUNTBLANK:** The **COUNTBLANK** function in Excel is used to count the number of empty cells in a given range.

**Syntax:** =COUNTA(value1, [value2], ...)

- **value1:** This is the first value or range of values that you want to count.
- **[value2], ...:** These are optional additional values or ranges that you want to include in the countblank.

**Examples:**

- i. =COUNTBLANK(A1:A10)

This formula counts the number of empty cells in the range A1 to A10

## USING FORMULAS AND FUNCTIONS

5. **AVERAGE:** In Excel, you can use the AVERAGE function to calculate the average (mean) of a range of numbers. The basic syntax of the AVERAGE function is as follows:

**Syntax:** =AVERAGE(number1, [number2], ...)

**number1, number2, ... :** These are the numbers or cell references representing the values for which you want to find the average. You can include up to 255 arguments.

**Examples:**

- i. =AVERAGE(A1:A5)
- ii. =AVERAGE(10, 20, 30, 40, 50)

6. **MIN:** In Excel, the MIN function is used to find the smallest value in a range of numbers. The syntax for the MIN function is as follows:

**Syntax:** =MIN(number1, [number2], ...)

**number1, number2, ... :** These are the numbers or cell references representing the values for which you want to find the minimum. You can include up to 255 arguments.

**Examples:**

- i. =MIN(A1:A5)
- ii. =MIN(10, 20, 30, 40, 50)

7. **MAX:** In Excel, the MAX function is used to find the smallest value in a range of numbers. The syntax for the MAX function is as follows:

**Syntax:** =MAX(number1, [number2], ...)

**number1, number2, ... :** These are the numbers or cell references representing the values for which you want to find the maximum. You can include up to 255 arguments.

**Examples:**

- iii. =MAX(A1:A5)
- iv. =MAX(10, 20, 30, 40, 50)

## USING CONDITIONAL LOGIC FUNCTIONS

### (IF, AND, OR)

8. **IF:** In Excel, the IF function is a powerful logical function that allows you to perform different actions based on whether a specified condition evaluates to TRUE or FALSE. The syntax for the IF function is as follows:

**Syntax:** =IF(logical\_test, value\_if\_true, value\_if\_false)

- **logical\_test:** This is the condition you want to test. If this condition is TRUE, the function returns **value\_if\_true**; if FALSE, it returns **value\_if\_false**.
- **value\_if\_true:** This is the value that the function returns if the **logical\_test** evaluates to TRUE.
- **value\_if\_false:** This is the value that the function returns if the **logical\_test** evaluates to FALSE.

**Example:**

Suppose you have a column of numbers in cells A1 through A5, and you want to label each cell as "High" if the number is greater than 50 and "Low" if it's 50 or less. You can use the IF function like this:

=IF(A1>50, "High", "Low")

You can nest multiple IF functions for more complex conditions. For example:

=IF(A1>50, "High", IF(A1>25, "Medium", "Low"))

This formula checks if A1 is greater than 50; if TRUE, it returns "High". If FALSE, it checks if A1 is greater than 25; if TRUE, it returns "Medium". If both conditions are FALSE, it returns "Low".

9. **AND:** In Excel, the AND function is a logical function that checks whether all the specified conditions are TRUE. It returns TRUE if all conditions are met and FALSE if any one or more conditions are not met. The syntax for the AND function is as follows:

**Syntax:** =AND(logical1, [logical2], ...)

## USING FORMULAS AND FUNCTIONS

**logical1, logical2, ...:** These are the conditions or expressions that you want to test. You can include up to 255 arguments.

**Examples:**

1. =AND(A1>10, B1<20)

This formula checks if the value in cell A1 is greater than 10 and if the value in cell B1 is less than 20. If both conditions are TRUE, the AND function returns TRUE; otherwise, it returns FALSE.

2. =AND(A1>10, B1<20, C1="Open")

10. **OR:** In Excel, the AND function is a logical function that checks whether all the specified conditions are TRUE. It returns TRUE if all conditions are met and FALSE if any one or more conditions are not met. The syntax for the AND function is as follows:

**Syntax:** =AND(logical1, [logical2], ...)

logical1, logical2, ...: These are the conditions or expressions that you want to test. You can include up to 255 arguments.

**Examples:**

i. =OR(A1>10, B1<20)

This formula checks if the value in cell A1 is greater than 10 or if the value in cell B1 is less than 20. If at least one of the conditions is TRUE, the OR function returns TRUE; otherwise, it returns FALSE.

ii. =OR(A1>10, B1<20, C1="Open")

This formula checks three conditions: A1 is greater than 10, B1 is less than 20, and C1 is equal to "Open". If at least one of these conditions is met, the OR function returns TRUE; otherwise, it returns FALSE.

## Using Formulas to Conditionally Summarize Data

### (SUMIF, COUNTIF)

11. **SUMIF():** The SUMIF function is a popular function in spreadsheet software. It allows you to sum a range of values based on a specified condition. The basic syntax of the SUMIF function typically includes three main components:

**Syntax:** SUMIF(range, criteria, [sum\_range])

- **range:** This is the range of cells that you want to apply the criteria to. The function will sum the corresponding values based on whether they meet the specified condition.
- **criteria:** This is the condition or criteria that determine which cells to include in the sum. It can be expressed as a number, text, expression, or another cell reference.
- **[sum\_range]:** This is an optional argument. If provided, it specifies the actual range of cells whose values will be summed. If omitted, the **range** is used for both the criteria and sum range.

**Example:** =SUMIF(A1:A10, ">50", B1:B10)

- **A1:A10** is the range of cells containing the criteria.
- **">50"** is the condition, indicating that the function should sum values in the corresponding cells in the range **B1:B10** where the values in **A1:A10** are greater than 50.

12. **COUNTIF():** to count the number of cells within a range that meet a specific condition. The syntax for **COUNTIF** is generally:

**Syntax:** =COUNTIF(range, criteria)

- **range:** The range of cells you want to apply the criteria to.
- **criteria:** The condition or criteria that must be met for a cell to be counted.

## USING FORMULAS AND FUNCTIONS

**Example:** =COUNTIF(A1:A10, ">5")

This formula will count the number of cells in the range A1 to A10 that are greater than 5.

## USING FORMULAS TO MODIFY TEXT

(LEFT, RIGHT, MID, TRIM, UPPER, LOWER, CONCATENATE).

13. **LEFT()**: It is used to extract a specified number of characters from the beginning (leftmost side) of a text string. The syntax for the LEFT function is generally:

**Syntax:** =LEFT(text, num\_chars)

- **text:** The text string from which you want to extract characters.
- **num\_chars:** The number of characters you want to extract from the left side of the text.

**Example:** =LEFT("Hello, World!", 5)

In this example, the **LEFT** function extracts the first 5 characters from the text string "Hello, World!", and the result would be "Hello".

14. **RIGHT()**: It is used to extract a specified number of characters from the beginning (leftmost side) of a text string. The syntax for the LEFT function is generally:

**Syntax:** =RIGHT(text, num\_chars)

- **text:** The text string from which you want to extract characters.
- **num\_chars:** The number of characters you want to extract from the right side of the text.

**Example:** =RIGHT("Hello, World!", 5)

In this example, the **RIGHT** function extracts the last 5 characters from the text string "Hello, World!", and the result would be "World".

15. **MID()**: It is used to extract a specific number of characters from a text string, starting at a specified position. The syntax for the **MID** function is generally:

**Syntax:** =MID(text, start\_position, num\_chars)

- **text:** The text string from which you want to extract characters.
- **start\_position:** The starting position from which to begin extracting characters.
- **num\_chars:** The number of characters to extract.

**Example:** =MID("Hello, World!", 7, 5)

In this example, the **MID** function starts at the 7th position of the text string "Hello, World!" and extracts 5 characters, resulting in "World".

16. **TRIM()**: Removes all spaces from text except for single spaces between words.

**Syntax:** =TRIM(text)

- **Text:** The text from which you want spaces removed.

**Example:** =TRIM(" First Quarter Earnings ")

In this example, **TRIM** function removes leading and trailing spaces from the text (First Quarter Earnings)

17. **UPPER()**: Converts text to uppercase.

**Syntax:** =UPPER(text)

- **Text:** The text you want converted to uppercase. Text can be a reference or text string.

**Example:** =UPPER("Pakistan zindabad")

18. **lower()**: Converts text to lowercase.

**Syntax:** =lower(text)

- **Text:** The text you want converted to lowercase. Text can be a reference or text string.

**Example:** =lower("PAKISTAN ZINDABAD")

**Output:** Pakistan zindabad

19. **Concatenate()**: to join two or more text strings into one string.

**Syntax:** =CONCATENATE(text1, [text2], ...)

- **text1:** The first item to join. The item can be a text value, number, or cell reference.
- **text2, ... (optional)** Additional text items to join. Upto 255 items or 8,192 characters.

**Example:** =Concatenate(A1,A2)      A1: Pakistan    A2: Zindabad

In this example the cell A1 and A2 contents are joined to another cell A3.

**Output:** Pakistan Zindabad

## CREATING CHARTS

### CREATING CHARTS

1. Creating a new chart,
2. Formatting a chart with a quick style,
3. Formatting a data series, modifying a chart's legend, choosing a different chart type,
4. Switching between rows and columns in source data.

#### 1. CREATING A NEW CHART

**Description:** Charts help you visualize your data in a way that creates maximum impact on your audience.

**Steps:**

1. Select data for the chart.
2. Select Insert > Recommended Charts.
3. Select a chart on the Recommended Charts tab, to preview the chart.
4. Select a chart.
5. Select Ok.

#### 2. FORMATTING A CHART WITH A QUICK STYLE

**Description:** you can apply a quick style to format it.

**Steps:**

1. Click on the chart to select it. Make sure the entire chart is highlighted.
2. Chart Tools:  
In Microsoft Excel, you'll see a "Chart Tools" contextual tab appear in the ribbon when the chart is selected. This tab contains options for formatting your chart.
3. Choose a Quick Style:  
Look for an option like "Quick Styles" or "Chart Styles" within the "Chart Tools" tab. Click on it to open a gallery of pre-designed styles.
4. Preview Styles:  
Hover over the different style options to see a live preview of how each one will look on your chart.
5. Apply the Style:  
Click on the style you like to apply it to your chart.

#### 3. FORMATTING A DATA SERIES, MODIFYING A CHART'S LEGEND, CHOOSING A DIFFERENT CHART TYPE,

**Formatting a Data Series:**

1. **Select the Data Series:** Click on the data series in your chart that you want to format.
2. **Format Data Series:** Right-click on the selected data series, and choose "Format Data Series" from the context menu.
3. **Format Options:** In the Format Data Series pane or dialog box that appears, you can modify various aspects of the data series, such as fill color, line color, marker style.
4. **Apply Changes:** Once you've made your desired formatting changes, click "OK" or "Apply" to see the updated appearance of the data series on your chart.

**Modifying a Chart's Legend:**

1. **Select the Legend:** Click on the legend to select it. The entire legend should be highlighted.
2. **Format Legend:** Right-click on the selected legend, and choose "Format Legend" from the context menu.
3. **Legend Options:** In the Format Legend pane or dialog box, you can adjust the legend position, font, style, and other formatting options.
4. **Apply Changes:** Click "OK" or "Apply" to apply the changes to the chart legend.

**Choosing a Different Chart Type:**

## CREATING CHARTS

1. **Select the Chart:** Click on the chart to select it. Make sure the entire chart is highlighted.
2. **Change Chart Type:** In the ribbon at the top, go to the "Chart Tools" or "Design" tab, Look for the "Change Chart Type" option.
3. **Select New Chart Type:** In the "Change Chart Type" dialog box, choose a different chart type from the available options. You can preview how the chart will look before making a selection.
4. **Confirm Changes:** Click "OK" to apply the new chart type. Your chart will now be updated with the selected type.

## 4. SWITCHING BETWEEN ROWS AND COLUMNS IN SOURCE DATA.

**Description:** Use the **Select Data Source** dialog box to edit the data in your series or rearrange them on your chart.

### Steps:

1. Right-click your chart, and then choose **Select Data**.
2. In the **Legend Entries (Series)** box, click the series you want to change.
3. Click **Edit**, make your changes, and click **OK**.



## EXCEL MACROS

## EXCEL MACROS

1. Definition of Macro
- 2 Adding the “Developer” Tab on Ribbon
- 3 Steps involved in Recording a simple Macro
- 4 Recording a Macro using Absolute References
- 5 Recording a Macro using Relative References.
- 6 Running a Macro
- 7 Creating a Macro for adding a list of items (such as cities, countries, fruits etc)
- 8 Creating a Macro for changing the Font and Font size of the whole worksheet
- 9 Creating a Macro for changing Date format
- 10 Assigning a macro to a Control Button

**1. DEFINITION OF A MACRO:**

If you have tasks in Microsoft Excel that you do repeatedly, you can record a macro to automate those tasks. A macro is an action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes.

**2 ADDING THE “DEVELOPER” TAB ON RIBBON**

The **Developer** tab isn't displayed by default, but you can add it to the ribbon.

1. On the **File** tab, go to **Options > Customize Ribbon**.
2. Under **Customize the Ribbon** and under **Main Tabs**, select the **Developer** check box.

**3 STEPS INVOLVED IN RECORDING A SIMPLE MACRO**

1. In the Code group on the Developer tab, click Record Macro.
2. Optionally, enter a name for the macro in the Macro name box, enter a shortcut key in the Shortcut key box, and a description in the Description box, and then click OK to start recording.
3. Record Macro
4. Perform the actions you want to automate.
5. On the Developer tab, click Stop Recording.
6. Stop Recording

**4 RECORDING A MACRO USING ABSOLUTE REFERENCES**

Recording a macro with absolute references is a useful feature Microsoft Excel. Absolute references ensure that the recorded macro always refers to specific cells or ranges, regardless of where the active cell is positioned during playback. This is particularly helpful when you want the macro to consistently perform actions on the same cells, irrespective of the cell from which you start recording.

**Steps to Record a Macro with Absolute References in Excel:**

1. Open Excel: Launch Microsoft Excel and open the workbook where you want to record the macro.
2. Enable Developer Tab: If you haven't enabled the Developer tab, go to File -> Options -> Customize Ribbon and check the "Developer" option.
3. Open Macro Recorder:
  - Go to the Developer tab.
  - Click on "Record Macro."
4. Set Macro Name and Location:
  - In the "Record Macro" dialog box, provide a name for your macro.
5. Select "Use Relative References":
  - You need to make sure the "Use Relative References" option is not selected. Absolute references are the default when "Use Relative References" is unchecked.
6. Click "OK" to Start Recording:
  - Click "OK" to start recording your macro.
7. Perform Actions:
  - Perform the actions you want to record. Excel will capture each action.



## EXCEL MACROS

8. Stop Recording:
  - When you're done, go back to the Developer tab.
  - Click on "Stop Recording."

### 5 RECORDING A MACRO USING RELATIVE REFERENCES.

Recording a macro with relative references in Microsoft Excel allows you to create a macro that adjusts its actions based on the position of the active cell during playback. This means that if you move the active cell to a different location, the macro will perform the same relative actions on the new location. Here's how you can record a macro with relative references:

#### Steps to Record a Macro with Relative References in Excel:

1. Open Excel: Launch Microsoft Excel and open the workbook where you want to record the macro.
2. Enable Developer Tab: If you haven't enabled the Developer tab, go to File -> Options -> Customize Ribbon and check the "Developer" option.
3. Open Macro Recorder:
  - Go to the Developer tab.
  - Click on "Record Macro."
4. Set Macro Name and Location:
  - In the "Record Macro" dialog box, provide a name for your macro.
5. Select "Use Relative References":
  - This is crucial. Make sure the "Use Relative References" option is selected. This means that the recorded macro will use relative references for the actions you perform during recording.
6. Click "OK" to Start Recording:
  - Click "OK" to start recording your macro.
7. Perform Actions:
  - Perform the actions you want to record. Excel will capture each action using relative references.
8. Stop Recording:
  - When you're done, go back to the Developer tab.
  - Click on "Stop Recording."

### 6 RUNNING A MACRO

#### Running a Macro in Excel:

1. Open the Workbook: Open the Excel workbook that contains the macro you want to run.
2. Enable Developer Tab:
  - If you haven't enabled the Developer tab, go to File -> Options -> Customize Ribbon and check the "Developer" option.
  - Click "OK."
3. Access Macros:
  - Go to the Developer tab.
  - Click on "Macros" in the Code group.
4. Select the Macro:
  - In the Macro dialog box that appears, you will see a list of available macros.
  - Select the macro you want to run.
5. Run Macro:
  - Click "Run."

### 7 CREATING A MACRO FOR ADDING A LIST OF ITEMS (SUCH AS CITIES, COUNTRIES, FRUITS ETC)

#### Steps to Create a Macro for Adding a List of Cities:

1. Open Excel: Open Excel and create a new or open an existing workbook.
2. Enable Developer Tab:

## EXCEL MACROS

- If not already enabled, go to File -> Options -> Customize Ribbon.
- Check the "Developer" option and click "OK."
- 3. Open Macro Recorder:
  - Go to the Developer tab.
  - Click on "Record Macro."
- 4. Set Macro Name and Location:
  - Provide a name for your macro (e.g., "AddCities").
- 5. Set Shortcut Key (Optional):
  - Optionally, you can assign a shortcut key for quick access to the macro.
- 6. Select "Use Relative References":
  - Depending on your preference, you can choose to use relative references. For this example, it might be more intuitive to keep this option unchecked.
- 7. Click "OK" to Start Recording:
  - Click "OK" to start recording your macro.
- 8. Add Cities:
  - Select the cell where you want the list to start.
  - Type the first city and press Enter.
  - Repeat for each city you want to add.
- 9. Stop Recording:
  - Go back to the Developer tab.
  - Click on "Stop Recording."

### Run the Macro:

1. Access Macros:
  - Go to the Developer tab.
  - Click on "Macros" in the Code group.
2. Select and Run the Macro:
  - In the Macro dialog box, select your macro ("AddCities").
  - Click "Run."

## 8 CREATING A MACRO FOR CHANGING THE FONT AND FONT SIZE OF THE WHOLE WORKSHEET

### Steps to Create a Macro for Changing Font and Font Size:

1. Open Excel: Open Excel and create a new or open an existing workbook.
2. Enable Developer Tab:
  - If not already enabled, go to File -> Options -> Customize Ribbon.
  - Check the "Developer" option and click "OK."
3. Open Macro Recorder:
  - Go to the Developer tab.
  - Click on "Record Macro."
4. Set Macro Name and Location:
  - Provide a name for your macro (e.g., "ChangeFont").
5. Set Shortcut Key (Optional):
  - Optionally, you can assign a shortcut key for quick access to the macro.
6. Select "Use Relative References":
  - Keep "Use Relative References" unchecked for this example.
7. Click "OK" to Start Recording:
  - Click "OK" to start recording your macro.
8. Change Font and Font Size:
  - Select any cell in the worksheet to ensure the entire sheet is affected.
  - Change the font to "Arial" and set the font size to 12 using the Font group in the Home tab.
9. Stop Recording:
  - Go back to the Developer tab.

## EXCEL MACROS

- Click on "Stop Recording."

### Run the Macro:

1. Access Macros:
  - Go to the Developer tab.
  - Click on "Macros" in the Code group.
2. Select and Run the Macro:
  - In the Macro dialog box, select your macro ("ChangeFont").
  - Click "Run."

## 9 CREATING A MACRO FOR CHANGING DATE FORMAT

### Steps to Create a Macro for Changing Date Format:

1. Open Excel: Open Excel and create a new or open an existing workbook.
2. Enable Developer Tab:
  - If not already enabled, go to File -> Options -> Customize Ribbon.
  - Check the "Developer" option and click "OK."
3. Open Macro Recorder:
  - Go to the Developer tab.
  - Click on "Record Macro."
4. Set Macro Name and Location:
  - Provide a name for your macro (e.g., "ChangeDateFormat").
5. Set Shortcut Key (Optional):
  - Optionally, you can assign a shortcut key for quick access to the macro.
6. Select "Use Relative References":
  - Keep "Use Relative References" unchecked for this example.
7. Click "OK" to Start Recording:
  - Click "OK" to start recording your macro.
8. Change Date Format:
  - Select the range of cells containing dates that you want to format.
  - Right-click on the selected range and choose "Format Cells."
  - In the Format Cells dialog box, go to the "Number" tab.
  - Choose "Date" from the category list.
  - Select the desired date format (e.g., "dd-mmm-yyyy").
  - Click "OK" to apply the format.
9. Stop Recording:
  - Go back to the Developer tab.
  - Click on "Stop Recording."

### Run the Macro:

1. Access Macros:
  - Go to the Developer tab.
  - Click on "Macros" in the Code group.
2. Select and Run the Macro:
  - In the Macro dialog box, select your macro ("ChangeDateFormat").
  - Click "Run."

## 10 ASSIGNING A MACRO TO A CONTROL BUTTON

### Steps to Assign a Macro to a Control Button:

1. Open Excel: Open the Excel workbook containing the macro you want to assign to a button.
2. Go to the Developer Tab:
  - If the Developer tab is not visible, go to File -> Options -> Customize Ribbon.
  - Check the "Developer" option and click "OK."
3. Insert a Button:
  - Go to the Developer tab.
  - Click on "Insert" in the Controls group.

---

## EXCEL MACROS

- Under Form Controls, choose the "Button" (it looks like a rectangle).
- 4. Draw the Button:
  - Click and drag to draw the button on your worksheet.
- 5. Assign Macro:
  - Right-click on the button.
  - Select "Assign Macro."
- 6. Select the Macro:
  - In the Assign Macro dialog box, you will see a list of available macros.
  - Select the macro you want to assign to the button.
  - Click "OK."
- 7. Edit Button Text (Optional):
  - Right-click on the button.
  - Choose "Edit Text" to change the text displayed on the button (optional).
- 8. Format Button (Optional):
  - Right-click on the button.
  - Choose "Format Control" to change the appearance and properties of the button (optional).
- 9. Test the Button:
  - Click on the button to test if it runs the assigned macro.
- 10. Save the Workbook:
  - Save your workbook to preserve the button-macro association.

## MICROSOFT POWERPOINT

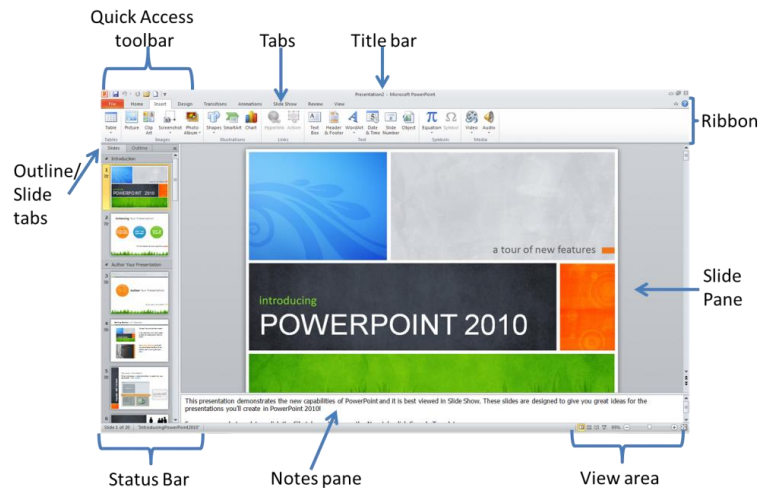
## MICROSOFT POWERPOINT

## UNIT #1: INTRODUCTION

## 1. PowerPoint Startup Screen,

## 2. User Interface Components

- Title Bar,
- Quick Access Toolbar,
- Tabs
- Ribbon,
- Slides Pane,
- Notes Pane,
- Status Bar,
- View Area.

1. **Title Bar:**

- Located at the top of the PowerPoint window.
- Displays the name of the current presentation.
- Contains the minimize, maximize/restore, and close buttons on the right.

2. **Quick Access Toolbar:**

- Positioned above or below the Ribbon.
- Provides quick access to frequently used commands.
- Customizable to include the commands you use most often.

3. **Ribbon:**

- A horizontal bar that runs across the top of the PowerPoint window.
- Divided into tabs, each representing a specific set of commands.
- Tabs include Home, Insert, Design, Transitions, Animations, Slide Show, Review, and View.

4. **Dialog Box Launcher:**

- Small arrow or button located in the lower-right corner of some Ribbon groups.
- Clicking it opens a related dialog box with more advanced options for that group.

5. **Slides Pane:**

- Located on the left side of the PowerPoint window.
- Displays thumbnails of all slides in the presentation.
- Allows for easy navigation between slides.

6. **Main Work Area:**

- The central part of the PowerPoint window where you create and edit slides.
- Includes the slide canvas where you can add text, images, and other elements to your slides.

7. **Status Bar:**

- Positioned at the bottom of the PowerPoint window.
- Provides information about the current slide number, design layout, and zoom level.
- Also includes View buttons for switching between different PowerPoint views.

## MICROSOFT POWERPOINT

### 8. Ribbon Tabs:

- Each tab on the Ribbon represents a category of commands related to a specific task.
- Common tabs include:
  - **Home:** Basic formatting and editing options.
  - **Insert:** Adding new elements such as slides, pictures, shapes, etc.
  - **Design:** Customizing the overall look and feel of the presentation.
  - **Transitions:** Applying slide transition effects.
  - **Animations:** Adding animation effects to objects on slides.
  - **Slide Show:** Options for presenting the slideshow.
  - **Review:** Proofing, commenting, and collaboration tools.
  - **View:** Controlling the presentation view and layout.

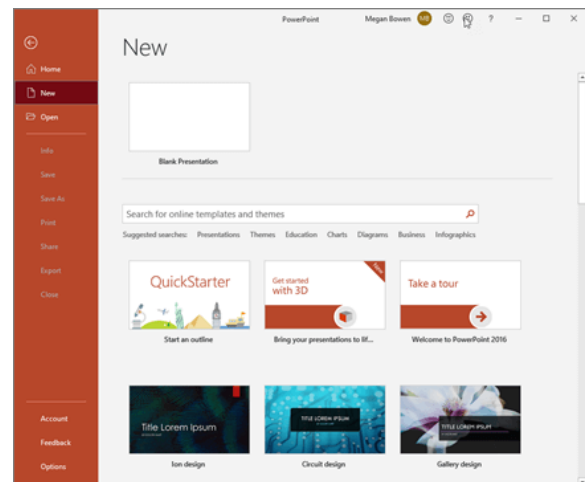
## UNIT #2: PRESENTATION BASICS

## UNIT #2: PRESENTATION BASICS

1. Creating a Presentation,
2. Saving a Presentation,
3. Closing a Presentation,
4. Adding New Slides to a Presentation,
5. Selection of Layout,
6. Duplicating Selected Slides,
7. Rearranging Slides in a Presentation,
8. Deleting Slides from a presentation
9. Using the Print Preview for Printing Slides
10. Changing Print Layout

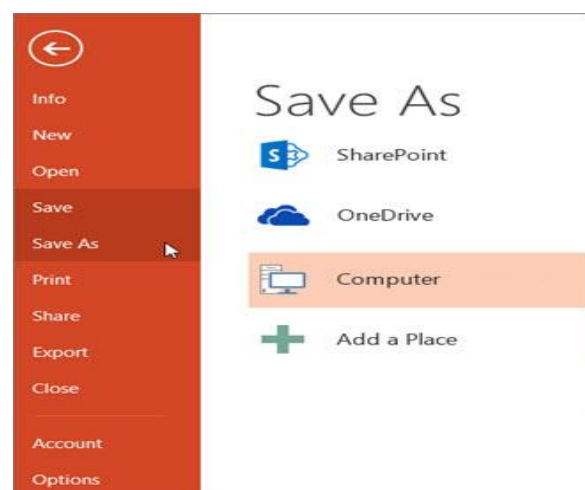
## 1. CREATING A PRESENTATION

1. Open PowerPoint.
2. In the left pane, select **New**.
3. Select an option:
  - To create a presentation from scratch, select **Blank Presentation**.
  - To use a prepared design, select one of the templates.



## 2. SAVING A PRESENTATION

1. On the **File** tab, select **Save**.
2. Do one of the following:
  - To save to your local drive, such as your laptop, a flash drive, CD or DVD drive, select **Computer**.
  - To save to a SharePoint Library, select **SharePoint**.
3. Under **Save As > Recent Folders**, select **Browse**, pick a path and file folder, and then name the file.
4. Select **Save**.



## 3. CLOSING A PRESENTATION:

1. **Close the Presentation:**
  - Once your presentation is saved, you have a few options to close it:
    - Click on the "File" tab and select "Close." This will close the current presentation, but leave PowerPoint open.
    - Click on the "X" button in the top-right corner of the PowerPoint window. This will close both the presentation and PowerPoint itself.

## 4. ADD NEW SLIDES TO A PRESENTATION

1. Select the slide you want your new slide to follow.
2. Select **Home > New Slide**. Or Press **Ctrl + M**
3. Select a layout.
4. Select the text box and type.

## UNIT #2: PRESENTATION BASICS

### 5. SELECTION OF LAYOUT

#### To Change the Layout of an Existing Slide:

1. **Open your Presentation:**
  - Open the PowerPoint presentation containing the slide whose layout you want to change.
2. **Navigate to the Slide Sorter View or Normal View:**
  - You can use either the "Normal View" or the "Slide Sorter View" to see all your slides at once.
3. **Select the Slide:**
  - Click on the thumbnail of the slide you want to modify.
4. **Go to the Slide Layout Options:**
  - Once the slide is selected, go to the "Home" tab on the Ribbon.
5. **Choose a Layout:**
  - In the "Slides" group on the "Home" tab, click on the dropdown arrow next to the "Layout" button. This will display a gallery of available slide layouts.
6. **Select a Layout:**
  - Browse through the available layouts and click on the one that best fits your needs.
7. **Apply the Layout:**
  - Click on the desired layout, and it will be applied to the selected slide.

#### To Change the Layout Before Adding a New Slide:

1. **Insert a New Slide:**
  - If you're adding a new slide, go to the "Home" tab on the Ribbon.
2. **Choose a Layout:**
  - In the "Slides" group, click on the dropdown arrow next to the "New Slide" button.
3. **Select a Layout:**
  - A gallery of available slide layouts will appear. Choose the layout you want to apply to the new slide.
4. **New Slide with Chosen Layout:**
  - Click on the layout, and a new slide with the selected layout will be added to your presentation.

### 6. DUPLICATING SELECTED SLIDES

#### To Duplicate a Single Slide:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation that contains the slide you want to duplicate.
2. **Go to the Slide Sorter View or Normal View:**
  - Navigate to the "Normal View" or "Slide Sorter View."
3. **Select the Slide:**
  - Click on the thumbnail of the slide you want to duplicate.
4. **Duplicate the Slide:**
  - Right-click on the selected slide, and from the context menu, choose "Duplicate Slide."

OR

- With the slide selected, you can also use the keyboard shortcut:
  - **Windows:** Press **Ctrl + D**
- 5. **Result:**
  - A duplicate slide will be added right after the original slide in your presentation.

#### TO DUPLICATE MULTIPLE SLIDES:



## UNIT #2: PRESENTATION BASICS

1. **Open Your Presentation:**
  - Open the PowerPoint presentation that contains the slides you want to duplicate.
2. **Go to the Slide Sorter View or Normal View:**
  - Navigate to the "Normal View" or "Slide Sorter View."
3. **Select Multiple Slides:**
  - Hold down the **Shift** key or **Ctrl** key (Windows)
4. **Duplicate the Slides:**
  - Right-click on one of the selected slides, and from the context menu, choose "Duplicate Slide."

OR

- With the slides selected, you can also use the keyboard shortcut:
  - **Windows:** Press **Ctrl + D**

## 7. REARRANGING SLIDES IN A PRESENTATION

### Rearranging Slides in Normal View or Slide Sorter View:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation you want to edit.
2. **Navigate to Slide Sorter View (Optional):**
  - You can switch to Slide Sorter View by clicking the "Slide Sorter" button at the bottom of the PowerPoint window. This view displays thumbnails of all slides in your presentation.
3. **Select the Slide(s):**
  - Click on the thumbnail of the slide you want to move. To select multiple slides, hold down the **Shift** key (for a range of slides) or **Ctrl** key (Windows) / **Command** key (Mac) while clicking on the slides.
4. **Drag and Drop:**
  - Once the slide(s) are selected, click and hold on the selected slide(s), and then drag them to the desired position.
5. **Release the Mouse Button:**
  - Release the mouse button to drop the slide(s) into the new position.
6. **Review the Order:**
  - Verify that the slides are in the desired order.

### Rearranging Slides in Outline View:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation you want to edit.
2. **Navigate to Outline View (Optional):**
  - Click the "View" tab in the Ribbon and select "Outline View." This view displays your slides as an outline with titles and content.
3. **Select the Slide(s):**
  - Click on the slide in the outline view that you want to move. To select multiple slides, hold down the **Shift** key (for a range of slides) or **Ctrl** key (Windows) / **Command** key (Mac) while clicking on the slides.
4. **Cut and Paste:**
  - Use the **Ctrl + X** (Windows) or **Command + X** (Mac) keyboard shortcut to cut the selected slide(s). Move to the new position and use **Ctrl + V** (Windows) or **Command + V** (Mac) to paste.
5. **Review the Order:**
  - Verify that the slides are in the desired order.

### Rearranging Slides in Slide Show View:

While in Slide Show view, you can navigate through the slides using keyboard shortcuts. Press the **Up Arrow** or **Down Arrow** keys to move backward or forward in the presentation.

## 8. DELETING SLIDES

## UNIT #2: PRESENTATION BASICS

### Deleting a Single Slide:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation that contains the slide you want to delete.
2. **Navigate to Normal View or Slide Sorter View:**
  - Go to the "Normal View" or "Slide Sorter View" by clicking the appropriate button at the bottom of the PowerPoint window.
3. **Select the Slide:**
  - Click on the thumbnail of the slide you want to delete.
4. **Delete the Slide:**
  - Right-click on the selected slide, and from the context menu, choose "Delete Slide."

OR

- With the slide selected, you can also use the keyboard shortcut:
  - **Windows:** Press **Delete** or **Backspace**
- 5. **Confirm Deletion (if prompted):**
  - If prompted to confirm the deletion, click "Yes" or "Delete."

### Deleting Multiple Slides:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation containing the slides you want to delete.
2. **Navigate to Normal View or Slide Sorter View:**
  - Go to the "Normal View" or "Slide Sorter View."
3. **Select the Slides:**
  - Hold down the **Shift** key (for a range of slides) or **Ctrl** key (Windows)
4. **Delete the Slides:**
  - Right-click on one of the selected slides, and from the context menu, choose "Delete Slide."

OR

- With the slides selected, you can also use the keyboard shortcut:
  - **Windows:** Press **Delete** or **Backspace**
- 5. **Confirm Deletion (if prompted):**
  - If prompted to confirm the deletion, click "Yes" or "Delete."

## 9. USING THE PRINT PREVIEW FOR PRINTING SLIDES

### Print Preview in PowerPoint:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation that you want to print.
2. **Go to the File Menu:**
  - Click on the "File" tab in the Ribbon to access the Backstage view.
3. **Select Print:**
  - In the Backstage view, click on "Print" in the left-hand menu. This will take you to the Print settings.
4. **Preview Your Slides:**
  - In the Print settings, you'll see a preview of your slides on the right side of the screen. This is the Print Preview.
5. **Navigate Through Slides:**
  - You can use the arrow buttons to navigate through the slides in the Print Preview. This allows you to see how each slide will appear when printed.
6. **Adjust Print Settings:**
  - Below the Print Preview, you'll find various print settings:
    - **Print Layout:** Choose between Full Page Slides, Notes Pages, Outline, and more.

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## UNIT #2: PRESENTATION BASICS

- **Color:** Select whether to print in color or grayscale.
  - **Printer:** Choose the printer you want to use.
  - **Print Range:** Specify which slides to print (All, Current Slide, Selection, or a custom range).
7. **Page Setup (Optional):**
    - Click on the "Page Setup" link to access additional settings like paper size, orientation, and margins.
  8. **Print:**
    - Once you are satisfied with the Print Preview and settings, click the "Print" button to send the presentation to the printer.

## 10. CHANGING PRINT LAYOUT

### Changing Print Layout in PowerPoint:

1. **Open Your Presentation:**
  - Open the PowerPoint presentation for which you want to change the print layout.
2. **Go to the File Menu:**
  - Click on the "File" tab in the Ribbon to access the Backstage view.
3. **Select Print:**
  - In the Backstage view, click on "Print" in the left-hand menu.
4. **Access Print Layout Options:**
  - In the Print settings, you'll see a preview of your slides on the right side of the screen. Below the preview, you'll find the "Print Layout" drop-down menu.
5. **Choose a Print Layout:**
  - Click on the "Print Layout" drop-down menu to see available layout options. Common options include:
    - **Full Page Slides:** Prints one slide per page.
    - **Notes Pages:** Prints each slide with its speaker notes.
    - **Outline:** Prints an outline of your slides.
    - **Handouts:** Prints multiple slides on one page for distributing to an audience.
6. **Adjust Print Settings (Optional):**
  - You can also adjust other print settings, such as color, printer selection, print range, and page setup.
7. **Preview Changes:**
  - As you choose different print layout options, the Print Preview on the right side will update to show you how the slides will appear when printed.
8. **Print:**
  - Once you are satisfied with the print layout and settings, click the "Print" button to send the presentation to the printer.

## WORKING WITH TEXT

### WORKING WITH TEXT

1. Using Text Box to Slides,
2. Changing Font Size & Color,
3. Using Format Painter,
4. Creating Numbered Lists, Creating Bulleted Lists,
5. Formatting the Text Box (Using Quick Style, Applying Fill & Border, Applying Texture & Pattern Fill),
6. Checking Spelling.

#### **1. USING TEXT BOX TO SLIDES,**

1. Open your PowerPoint presentation.
2. Navigate to the slide where you want to add a text box.
3. Click on the "Insert" tab in the PowerPoint ribbon.
4. In the "Text" group, click on "Text Box." Alternatively, you can also click on the "Text Box" option in the "Home" tab.
5. Click on the slide where you want to place the text box, and a cursor will appear. Click and drag to create the text box.
6. Type or paste your text into the text box.

#### **2. CHANGING FONT SIZE & COLOR**

Changing Font Size:

1. Select the text box or text you want to modify.
2. Navigate to the "Home" tab in the PowerPoint ribbon.
3. In the "Font" group, you'll find the "Font Size" dropdown menu. Click on it and select the desired font size.

Changing Font Color:

1. Select the text box or text.
2. Again, in the "Font" group on the "Home" tab, you'll find the "Font Color" dropdown arrow. Click on it and choose the color you want.

#### **3. USING FORMAT PAINTER**

1. Select the text or object that has the formatting you want to copy.
2. On the "Home" tab in the PowerPoint ribbon, find the "Format Painter" button. It looks like a paintbrush.
3. Click the "Format Painter" button once to activate it.
4. Click on the text or object where you want to apply the formatting. Your cursor will now have a paintbrush icon attached.
5. Click on the destination text or object, and it will inherit the formatting of the original.
6. To stop using the Format Painter, press the "Esc" key or click the "Format Painter" button again.

#### **4. CREATING NUMBERED LISTS, CREATING BULLETED LISTS,**

Creating Numbered Lists:

1. Click on the text box or placeholder where you want to create the numbered list.
2. Type your first item and press "Enter" on your keyboard.
3. PowerPoint will automatically recognize that you are creating a list and will add the next number.
4. Continue typing each item, and PowerPoint will automatically number them.

Creating Bulleted Lists:

1. Click on the text box or placeholder where you want to create the bulleted list.
2. Type your first item and press "Enter" on your keyboard.

## WORKING WITH TEXT

3. PowerPoint will automatically recognize that you are creating a list and will add a bullet point.
  4. Continue typing each item, and PowerPoint will automatically add a bullet point to each.
5. Formatting the Text Box (Using Quick Style, Applying Fill & Border, Applying Texture & Pattern Fill),

### Creating Numbered Lists:

1. Click on the text box or placeholder where you want to create the numbered list.
2. Type your first item and press "Enter" on your keyboard.
3. PowerPoint will automatically recognize that you are creating a list and will add the next number.
4. Continue typing each item, and PowerPoint will automatically number them.

### Creating Bulleted Lists:

1. Click on the text box or placeholder where you want to create the bulleted list.
2. Type your first item and press "Enter" on your keyboard.
3. PowerPoint will automatically recognize that you are creating a list and will add a bullet point.
4. Continue typing each item, and PowerPoint will automatically add a bullet point to each.

### Using Quick Style:

1. Click on the text box you want to format.
2. In the PowerPoint ribbon, navigate to the "Format" tab.
3. In the "Shape Fill" or "Shape Outline" dropdowns, you can choose from predefined styles or use the "Quick Styles" options.

### Applying Fill & Border:

1. Click on the text box you want to format.
2. In the PowerPoint ribbon, navigate to the "Format" tab.
3. Use the "Shape Fill" dropdown to choose a color or gradient for the fill.
4. Use the "Shape Outline" dropdown to set the border color and style.

### Applying Texture & Pattern Fill:

1. Click on the text box you want to format.
2. In the PowerPoint ribbon, navigate to the "Format" tab.
3. Open the "Shape Fill" dropdown and choose "Texture" or "Pattern Fill."
4. Select a texture or pattern from the available options.

## 6. Checking Spelling.

1. Open your PowerPoint presentation.
2. Click on the "Review" tab in the PowerPoint ribbon.
3. In the "Proofing" group, you'll find the "Spelling" button. Click on it.
4. PowerPoint will start checking the spelling in your presentation. If it finds any spelling errors, it will suggest corrections.
5. Review the suggestions and choose the correct option or manually correct the spelling.
6. Click "Change" to apply the correction, or "Ignore" if the word is spelled correctly.
7. Once the spell check is complete, PowerPoint will display a message indicating that the spell check is finished.

## ADDING TABLES AND CHARTS IN A PRESENTATION

### ADDING TABLES AND CHARTS IN A PRESENTATION

1. Inserting a Table
2. Inserting Excel Worksheet
3. Applying Table Styles
4. Inserting Chart
5. Resizing &
6. Moving a Chart.

#### Inserting a Table

1. Open PowerPoint:
  - Launch Microsoft PowerPoint and open the presentation where you want to insert a table.
2. Select Slide:
  - Navigate to the slide where you want to add the table.
3. Insert Table:
  - Click on the "Insert" tab in the PowerPoint ribbon at the top of the window.
4. Table Menu:
  - In the "Tables" group, click on the "Table" option. A drop-down menu will appear.
5. Insert Table:
  - Hover your mouse over the grid to select the number of rows and columns for your table. Click to insert the table.
6. Draw Table (Optional):
  - If you want a custom-sized table, you can choose "Draw Table" at the bottom of the drop-down menu. Then, click and drag to draw the table size you need.
7. Enter Data:
  - Once the table is inserted, you can click inside any cell to start entering data.
8. Format Table:
  - To format the table, use the "Table Tools" that appear in the ribbon when the table is selected. You can change the style, color, and other formatting options.

#### Inserting Excel Worksheet

1. Open PowerPoint:
  - Launch Microsoft PowerPoint and open the presentation where you want to insert an Excel worksheet.
2. Select Slide:
  - Navigate to the slide where you want to add the Excel worksheet.
3. Insert Excel Worksheet:
  - Click on the "Insert" tab in the PowerPoint ribbon at the top of the window.
4. Object Menu:
  - In the "Text" group, click on the "Object" button. A dialog box will appear.
5. Create from File:
  - In the Object dialog box, go to the "Create from File" tab.
6. Browse for Excel File:
  - Click the "Browse" button and select the Excel file you want to insert into the PowerPoint presentation.
7. Insert Excel Sheet:
  - Once you've selected the file, click "Insert."
8. Display as Icon (Optional):
  - If you want to display the Excel sheet as an icon that can be clicked to open, check the "Link" box and "Display as icon" box in the Object dialog box.

## ADDING TABLES AND CHARTS IN A PRESENTATION

9. OK:
  - Click "OK" to close the Object dialog box.
10. Adjust and Format (Optional):
  - Resize and position the Excel object on your PowerPoint slide as needed. You can also format it using the options available in the PowerPoint ribbon.

### Applying Table Styles

1. Insert a Table:
  - Start by inserting a table into your PowerPoint slide. You can follow the steps mentioned earlier for inserting a table.
2. Select the Table:
  - Click anywhere inside the table to select it. When the table is selected, you'll see additional options in the ribbon.
3. Table Tools:
  - If you don't see the "Table Tools" contextual tab in the ribbon, make sure your table is selected.
4. Design Tab:
  - In the "Table Tools" contextual tab, go to the "Design" tab. This tab provides various options for formatting your table.
5. Choose a Table Style:
  - In the "Design" tab, you'll see a gallery of table styles in the "Table Styles" group. Hover your mouse over different styles to see a live preview of how they will look on your table.
6. Apply the Style:
  - Click on the style you want to apply, and it will be instantly applied to your table.
7. Customize Styles (Optional):
  - Some styles may have additional customization options. You can click on the drop-down arrow in the "Table Styles" group to access options like "New Table Style" and "Format Table."
8. Modify Table Style:
  - If you want to make custom changes to a style or create your own, you can choose "New Table Style." This allows you to modify various formatting elements like font, color, borders, etc.
9. Apply Preset Colors (Optional):
  - You can also apply preset color schemes to your table by selecting a color from the "Table Styles Options" group within the "Design" tab.
10. Review and Adjust:
  - After applying a style, review your table to ensure it meets your design preferences. You can always go back and change the style or make manual adjustments as needed.

### Inserting Chart

1. Open PowerPoint:
  - Launch Microsoft PowerPoint and open the presentation where you want to insert a chart.
2. Select Slide:
  - Navigate to the slide where you want to add the chart.
3. Insert Chart:
  - Click on the "Insert" tab in the PowerPoint ribbon at the top of the window.
4. Chart Options:

## ADDING TABLES AND CHARTS IN A PRESENTATION

- In the "Illustrations" group, click on the "Chart" option. A dialog box will appear, displaying various chart types.
- 5. Choose Chart Type:
  - Select the type of chart you want to insert. Common types include Column, Bar, Line, Pie, etc. You can preview the chart types and select the one that best suits your data.
- 6. Insert Data:
  - After choosing a chart type, click "OK." A placeholder chart will be inserted into your slide, and an Excel sheet will open where you can enter your data.
- 7. Enter Data in Excel:
  - Enter your data into the Excel sheet. You can also copy and paste data from another source.
- 8. Close Excel:
  - Once you've entered your data, close the Excel sheet. Your chart will now be updated with the data you entered.
- 9. Adjust and Format:
  - Click on the chart to select it. Use the "Chart Tools" in the ribbon to adjust the chart elements, such as titles, labels, colors, and styles.
- 10. Resize and Position:
  - Resize and position the chart on your slide as needed.
- 11. Save the Presentation:
  - Don't forget to save your presentation after inserting and formatting the chart.
- 12. Edit Data (Optional):
  - If you need to make changes to the data in the chart, you can double-click on the chart to open the linked Excel sheet and make adjustments.

### Resizing & Moving a Chart.

#### Resizing a Chart:

1. Select the Chart:
  - Click on the chart to select it. You should see handles (small squares) around the edges of the chart, indicating that it's selected.
2. Adjust the Size:
  - Hover over one of the corner handles until the cursor changes to a double-headed arrow. Click and drag to resize the chart proportionally. To resize without maintaining proportions, use the handles on the sides.

#### Moving a Chart:

1. Select the Chart:
  - Click on the chart to select it.
2. Move the Chart:
  - Hover over the chart until the cursor changes to a four-headed arrow. Click and drag the chart to the desired location on the slide.



## USING ANIMATION

### USING ANIMATION

1. Applying Transition Effects,
2. Applying Animations,
3. Using Motion Path Animation,
4. Modifying an Animation's Start Options and Timing,
5. Setting Up a Slide Show,
6. Using Presenter View,
7. Creating interactive presentation using Zoom tool

#### Applying Transition Effects

1. **Open PowerPoint:**
  - Launch Microsoft PowerPoint and open the presentation you want to work on.
2. **Select Slide:**
  - Navigate to the slide where you want to apply a transition.
3. **Transition Tab:**
  - Click on the "Transitions" tab in the PowerPoint ribbon at the top of the window.
4. **Choose a Transition:**
  - In the "Transition to This Slide" group, you'll see a gallery of transition effects. Hover over different transitions to see a live preview of how they will look.
5. **Apply Transition:**
  - Click on the desired transition effect to apply it to the selected slide. If you want the same transition for all slides, you can use the "Apply to All" button.

#### Applying Animations

1. **Open PowerPoint:**
  - Launch Microsoft PowerPoint and open the presentation you want to work on.
2. **Select an Object:**
  - Click on the object (text box, image, chart, etc.) that you want to animate. If you want to apply the animation to text, click on the text box containing the text.
3. **Animations Tab:**
  - Go to the "Animations" tab in the PowerPoint ribbon at the top of the window.
4. **Choose an Animation:**
  - In the "Animation" group, you'll see a gallery of animation effects. Hover over different animations to see a live preview of how they will look.
5. **Apply Animation:**
  - Click on the desired animation effect to apply it to the selected object. The object will now have a small number or symbol next to it, indicating that an animation has been applied.

#### Using Motion Path Animation,

Motion path animations in Microsoft PowerPoint allow you to move objects along a specified path on your slides. Here's how you can use motion path animation:

1. **Open PowerPoint:**
  - Launch Microsoft PowerPoint and open the presentation where you want to apply motion path animation.
2. **Insert an Object:**
  - Insert the object (text box, shape, image, etc.) that you want to animate. Click on the "Insert" tab, choose the type of object, and draw or insert it onto the slide.
3. **Select the Object:**
  - Click on the object to select it.
4. **Animations Tab:**

## USING ANIMATION

- Go to the "Animations" tab in the PowerPoint ribbon at the top of the window.
- 5. **Add Animation:**
  - In the "Animations" group, click on "Add Animation." From the drop-down menu, choose "More Motion Paths."
- 6. **Select a Motion Path:**
  - In the "Add Motion Path" submenu, choose the type of motion path you want (line, curve, freeform, etc.).
- 7. **Draw the Motion Path:**
  - If you selected a motion path that requires drawing (like Freeform or Scribble), use your mouse or touch input device to draw the path on the slide.

### Modifying an Animation's Start Options and Timing

In Microsoft PowerPoint, you can modify the start options and timing of animations to control when and how they occur during your presentation. Here's how you can do that:

#### Modifying Start Options:

1. **Select the Object:**
  - Click on the object with the animation you want to modify.
2. **Animations Tab:**
  - Go to the "Animations" tab in the PowerPoint ribbon.
3. **Animation Pane:**
  - In the "Advanced Animation" group, click on the "Animation Pane." This will open a pane on the right side of the PowerPoint window showing a list of all animations on the slide.
4. **View Start Options:**
  - In the Animation Pane, right-click on the animation you want to modify and choose "Effect Options."
5. **Start Options Tab:**
  - In the "Effect Options" dialog box, go to the "Start" tab.
6. **Modify Start Options:**
  - Adjust the start options according to your preferences. You can choose options like "On Click," "With Previous" (starts at the same time as the previous animation), or "After Previous" (starts after the previous animation completes).
7. **OK:**
  - Click "OK" to apply the changes.

#### Modifying Timing:

1. **Select the Object:**
  - Click on the object with the animation you want to modify.
2. **Animations Tab:**
  - Go to the "Animations" tab.
3. **Animation Pane:**
  - In the "Advanced Animation" group, click on the "Animation Pane."
4. **Timing Options:**
  - In the Animation Pane, right-click on the animation you want to modify and choose "Timing."
5. **Timing Tab:**
  - In the "Timing" tab of the "Timing" dialog box, you can adjust the following settings:
    - **Start:** Choose whether the animation starts "On Click," "After Previous," or at a specific time.
    - **Duration:** Set the duration of the animation.
    - **Delay:** Add a delay before the animation starts.
6. **OK:**

## USING ANIMATION

- Click "OK" to apply the changes.

### Adjusting Order:

#### 1. Animation Pane:

- Use the Animation Pane to reorder animations. Drag an animation up or down in the list to change its order.

#### 2. Start Options:

- Adjust the "Start" options of each animation to control when they begin in relation to other animations.

#### 3. Preview:

- Use the "Preview" button in the "Animations" tab or the Animation Pane to see how your animations will look in sequence.

#### 4. Save Your Presentation:

- Save your presentation after modifying animation start options and timing.

### Setting Up a Slide Show

#### 1. Open PowerPoint:

- Launch Microsoft PowerPoint on your computer.

#### 2. Choose a Template:

- PowerPoint offers various templates for different purposes. Choose a template that suits your presentation or start with a blank slide.

#### 3. Add Slides:

- Click on the "New Slide" button to add slides to your presentation. You can choose different layouts for each slide based on the content you want to include.

#### 4. Insert Content:

- Click on the placeholders on each slide to add titles, text, images, charts, or other content. You can also use the toolbar to insert various elements.

#### 5. Design and Format:

- Customize the design of your slides using the design options available. You can change the background, font styles, colors, and more.

#### 6. Transitions:

- To add transitions between slides, go to the "Transitions" tab. Choose a transition style and set the speed and other options.

#### 7. Animations:

- If you want to add animations to specific elements on your slides, go to the "Animations" tab. Select an element and choose an animation effect.

#### 8. Slide Show Setup:

- Before starting the slide show, make sure to set up the slideshow preferences. Go to the "Slide Show" tab, and you can configure options like starting the show from the current slide, setting up timings, etc.

#### 9. Slide Show Options:

- During the presentation, you can navigate through slides using keyboard shortcuts (Spacebar, Enter, Page Up, Page Down) or use the on-screen navigation tools.

### Using Presenter View

Presenter View is a feature in Microsoft PowerPoint that allows you to see additional information on your computer screen while your audience sees only the slides. It is especially useful when giving a presentation with dual monitors. Here's how to use Presenter View:

#### 1. Connect Dual Monitors:

- Ensure that your computer is connected to a second monitor or projector. This is essential for Presenter View.

#### 2. Start Slide Show:

## USING ANIMATION

- Open your PowerPoint presentation and go to the "Slide Show" tab.
- 3. **Set Up Slide Show Options:**
  - In the Slide Show tab, click on the "Set Up Slide Show" button.
  - In the Set Up Show dialog box, under the Multiple Monitors section, choose the option that suits your setup:
    - "Presented by a speaker (Full Screen)" if you want the slide show to appear on the secondary monitor only.
    - "Browsed by an individual (Window)" if you want to use Presenter View on your primary monitor.
- 4. **Start the Slide Show:**
  - Click on "From Beginning" or "From Current Slide" to start the presentation.
- 5. **Presenter View Controls:**
  - On your primary monitor, you will see Presenter View, which includes:
    - **Current Slide:** The slide currently being shown to the audience.
    - **Next Slide:** The next slide in your presentation.
    - **Notes:** Any speaker notes you've added to your slides.
    - **Slide Thumbnails:** A preview of all slides in your presentation.
- 6. **Navigate Through Slides:**
  - Use the arrow keys or click on the thumbnails to navigate through your slides in Presenter View.
- 7. **Annotations and Tools:**
  - Presenter View may include annotation tools such as a pen or highlighter. You can use these to annotate your slides during the presentation.
- 8. **End the Slide Show:**
  - To end the presentation, press the Esc key or right-click on the screen and select "End Show."

### Creating interactive presentation using Zoom tool

Creating an interactive presentation using Zoom involves leveraging the platform's features for engagement, collaboration, and audience interaction. Here's a guide on how to create an interactive presentation on Zoom:

1. **Plan Your Content:**
  - Define your objectives and structure your content accordingly.
  - Consider incorporating polls, Q&A sessions, and interactive elements to engage your audience.
2. **Create Presentation Slides:**
  - Use presentation software like Microsoft PowerPoint, Google Slides, or Keynote to create visually appealing slides.
3. **Include Interactive Elements:**
  - Embed polls, quizzes, or interactive questions within your presentation.
  - Utilize features like hyperlinks to navigate between slides or external resources.
4. **Practice and Test:**
  - Practice your presentation to ensure a smooth flow.
  - Test any interactive elements to ensure they work as intended.
5. **Share Your Screen:**
  - During your Zoom meeting, use the "Share Screen" feature to display your presentation.
  - Choose the specific window where your presentation is open.
6. **Enable Polls:**
  - Use Zoom's built-in polling feature to conduct polls during your presentation.
  - Set up polls in advance or create them on the fly during the meeting.
7. **Utilize Breakout Rooms:**

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## USING ANIMATION

- Break your audience into smaller groups using Zoom's breakout rooms.
  - Assign specific tasks or discussions related to your presentation topic.
8. **Encourage Chat and Q&A:**
    - Enable the chat feature to allow participants to ask questions and share comments.
    - Designate time for Q&A sessions or address questions throughout the presentation.
  9. **Interactive Whiteboard:**
    - Use Zoom's interactive whiteboard feature to draw, write, or brainstorm ideas in real-time.
  10. **Annotations:**
    - Encourage participants to use the annotation tools to highlight points on the shared screen.
  11. **Engage with Reactions:**
    - Participants can use Zoom's reaction buttons (e.g., applause, thumbs up) to express engagement.
  12. **Record Your Presentation:**
    - If allowed, record your presentation for participants who couldn't attend or for future reference.
  13. **Use Zoom Webinar for Larger Audiences:**
    - For larger audiences, consider using Zoom Webinar, which offers additional engagement features.
  14. **Follow Up:**
    - Share any additional resources, survey links, or follow-up materials after the presentation.

## MICROSOFT ACCESS

### MICROSOFT ACCESS

1. Introduction to Microsoft Access 2016
2. Creating a Database,
3. Saving a Database,
4. Opening an Existing Database.

#### Introduction to Microsoft Access 2016

Microsoft Access 2016 is a relational database management system (RDBMS) that allows users to store and manage data in a structured format. It is part of the Microsoft Office suite and is designed to provide an intuitive and user-friendly interface for creating and managing databases without requiring extensive programming knowledge.

#### Creating a Database

1. **Open Microsoft Access:**
  - Launch Microsoft Access 2016 on your computer.
2. **Create a New Blank Database:**
  - Click on "Blank Database" in the New tab.
3. **Name Your Database:**
  - Enter a name for your database in the "File Name" field.
  - Choose a location to save your database file.

#### Saving a Database

1. **Open Your Database:**
  - Make sure your database is open in Microsoft Access.
2. **Save the Database:**
  - Click on the "File" tab in the top-left corner of the Access window.
3. **Choose "Save As" or "Save Database As":**
  - If you are saving the database for the first time, or if you want to save a copy with a different name or in a different location, choose "Save Database As."
  - If you have already saved the database and just want to save your changes, choose "Save" or "Save As" and select the existing database file.
4. **Specify Name and Location:**
  - If you chose "Save Database As," enter a name for your database in the "File Name" field.
  - Choose the location where you want to save the database.
5. **Click "Save":**
  - Click the "Save" button to save your database with the specified name and location.

#### Opening an Existing Database.

1. **Launch Microsoft Access:**
  - Start Microsoft Access 2016 on your computer.
2. **Open the Backstage View:**
  - Click on the "File" tab in the top-left corner of the Access window. This will take you to the Backstage View.
3. **Choose "Open":**
  - In the Backstage View, click on "Open" to access options for opening files.
4. **Select Database:**
  - Navigate to the location where your database file is stored.
5. **Choose Database File:**
  - Select the database file you want to open. The file should have a ".accdb" extension.
6. **Click "Open":**

## MICROSOFT ACCESS

- After selecting the database file, click the "Open" button.

### CREATING TABLES

1. Creating a Table in Datasheet view,
2. Saving a Table,
3. Creating a custom Table in Design View,
4. Adding fields in a table,
5. Data types in Access,
6. Setting Primary Key field,
7. Creating relationship between two tables.

#### 1. Creating a Table in Datasheet view

- Click Table on the Ribbon (from the Create tab).
- A blank table will appear.
- Click Click to Add to add a new field.
- Select a data type from the contextual menu that expands when you click.
- Once you've selected a data type, Access highlights the column header so that you can name the field.
- Enter a name for the field.
- Repeat steps 2 and 3 for as many fields that you need to add.

#### 2. Saving a Table

Once you've set up the table, you should save it.

To save the table, right-click on the table's tab and select Save.

#### 3. Creating A Custom Table In Design View

- Open Microsoft Access:
- Open Microsoft Access and create a new database or open an existing one.
- Create a New Table:
- Click on the "Table Design" button in the toolbar to create a new table in Design view.
- Define Fields:

In the Table Design view, you'll see a grid with columns for Field Name, Data Type, and Description. Each row represents a field.

- Enter the Field Names in the "Field Name" column.
- Choose the appropriate "Data Type" for each field (e.g., Text, Number, Date/Time).
- Optionally, you can set additional properties for each field, such as field size, format, and validation rules.
- Set Primary Key:
- Save the table by clicking on the "Save" icon or using the "File" menu.
- Provide a name for the table when prompted and click "OK" to save.
- Enter Data in Datasheet View.

#### 4. Adding fields in a table

##### 1. Open the Database:

- Open Microsoft Access and open the database where you want to add a new field.

##### 2. Navigate to Table Design:

- In the Navigation Pane, select the table you want to modify.
- Click on the "Table Design" button in the toolbar.

##### 3. Add a New Field:

- In the Table Design view, scroll down to the first empty row in the "Field Name" column.
- Enter the desired name for the new field in the "Field Name" column.

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MICROSOFT ACCESS

4. **Select Data Type:**
  - In the "Data Type" column, choose the appropriate data type for your field. Common data types include Text, Number, Date/Time, etc.
5. **Set Field Properties (Optional):**
  - You can set additional properties for the field by specifying values in the columns like "Description," "Field Size," "Format," etc. This step is optional but allows you to define specific characteristics for the field.
6. **Save the Table:**
  - Save the changes by clicking the "Save" icon in the toolbar or using the "File" menu. If it's a new table, Access will prompt you to provide a name for the table.
7. **Add More Fields (Optional):**
  - If you need to add more fields, repeat steps 3-6 for each new field.
8. **Close Table Design:**
  - Once you've added all the desired fields, close the Table Design view.
9. **Enter Data in Datasheet View (Optional):**
  - If you want to enter data immediately, Access may prompt you to switch to Datasheet view. Alternatively, you can close the design and enter data later.

**DATA TYPES USED IN ACCESS**

1. **Text:**
  - **Short Text:** Used for short text or alphanumeric characters.
  - **Long Text:** Suitable for longer text fields, such as paragraphs or detailed descriptions.
2. **Number:**
  - **Byte:** Stores whole numbers from 0 to 255.
  - **Integer:** Stores whole numbers without decimal places.
  - **Long Integer:** Stores larger whole numbers.
  - **Single:** Stores single-precision floating-point numbers.
  - **Double:** Stores double-precision floating-point numbers.
  - **Decimal:** Stores fixed-point numbers with user-specified precision.
3. **Date/Time:**
  - **Date/Time:** Stores dates and times.
4. **Currency:**
  - **Currency:** Stores currency values.
5. **AutoNumber:**
  - **AutoNumber:** Automatically generates a unique number for each new record. Often used as a primary key.
6. **Yes/No:**
  - **Yes/No:** Stores true/false or yes/no values.
7. **Hyperlink:**
  - **Hyperlink:** Stores web addresses, email addresses, or file paths as hyperlinks.
8. **Attachment:**
  - **Attachment:** Allows users to attach files to records.
9. **Lookup & Relationship:**
  - **Lookup Wizard:** Creates a field with a predefined set of values.
  - **OLE Object:** Allows the storage of embedded objects, such as Excel spreadsheets or Word documents.
10. **Calculated:**
  - **Calculated:** Allows the creation of fields whose values are calculated based on expressions.



## MICROSOFT ACCESS

### Setting Primary Key in Table Design View:

1. **Open the Table:**
  - Open Microsoft Access and the database containing the table for which you want to set a primary key.
2. **Go to Table Design:**
  - In the Navigation Pane, locate and select the table.
  - Click on the "Table Design" icon in the toolbar.
3. **Select the Field(s):**
  - In the Table Design view, identify the field (or combination of fields) that you want to set as the primary key.
  - Click on the row selector (the gray box to the left of the field name) for the desired field(s).
4. **Set Primary Key:**
  - With the field(s) selected, click on the "Primary Key" button in the toolbar. The primary key icon (a key symbol) will appear next to the selected field(s).
5. **Save the Table:**
  - Save the changes by clicking the "Save" icon in the toolbar or using the "File" menu.
  - If you're setting the primary key for the first time, Access may prompt you to name and save the table.

### Setting Primary Key in Datasheet View:

1. **Open the Table:**
  - Open Microsoft Access and the database containing the table for which you want to set a primary key.
2. **Switch to Datasheet View:**
  - In the Navigation Pane, locate and select the table.
  - Click on the "View" icon in the toolbar and select "Datasheet View."
3. **Go to Design View:**
  - While in Datasheet View, click on the "View" icon again and select "Design View."
4. **Set Primary Key:**
  - In Design View, follow steps 3-5 from the "Setting Primary Key in Table Design View" section above.

Creating relationship between two tables.

### Creating a Relationship:

1. **Open the Database:**
  - Open Microsoft Access and the database containing the tables.
2. **Go to Relationships:**
  - In the Navigation Pane, click on the "Database Tools" tab.
  - Click on "Relationships" to open the Relationships window.
3. **Add Tables:**
  - Drag the tables you want to relate from the Navigation Pane to the Relationships window. If they are already open, Access will add them automatically.
4. **Define Relationship:**
  - In the Relationships window, you should see both tables.
  - Identify the common field in each table.
  - Click and drag the common field from one table to the matching field in the other table.
5. **Edit Relationships:**
  - After dragging the field, the Edit Relationships window will appear.
  - Verify that the fields are correctly matched.

## MICROSOFT ACCESS

- Choose the appropriate options for enforcing referential integrity and cascade update/delete if needed.
- 6. **Enforce Referential Integrity:**
  - Enforcing referential integrity ensures that relationships between tables are maintained. It prevents records from being deleted in the "one" table if related records exist in the "many" table.
  - Check the box for "Enforce Referential Integrity."
- 7. **Cascade Update/Delete:**
  - If you want changes to be automatically applied to related records, you can use the "Cascade Update Related Fields" and "Cascade Delete Related Records" options. These options can simplify data maintenance but should be used cautiously.
  - Click "Create" to create the relationship.
- 8. **Save and Close:**
  - Save the Relationships window.

## CREATING QUERIES

1. Creating a query from a table,
2. Adding table to a query,
3. Creating query from multiple tables,
4. Adding criteria to a query.

### 1. Creating a query from a table

1. Select Create > Query Wizard .
2. Select Simple Query, and then OK.
3. Select the table that contains the field, add the Available Fields you want to Selected Fields, and select Next.
4. Choose whether you want to open the query in Datasheet view or modify the query in Design view, and then
5. Select Finish.

### 2. Adding table to a query

1. Click the Create tab, click Query Wizard.
2. Select Simple Query Wizard and click OK.
3. In the Tables/Queries list and click the first table you want to use.
4. In the Available Fields pane, click the first field you want to use in the query and click.
5. Type the required criteria in the criteria
6. Run the query.

### 3. Creating query from multiple tables

1. Click the Create tab, click Query Wizard.
2. Select Simple Query Wizard and click OK.
3. In the Tables/Queries list and click the first table you want to use.
4. In the Available Fields pane, click the first field you want to use in the query and click.
5. Select each table you want to include in your query and click Add. You can press and hold the Ctrl key on your keyboard to select more than one table.
6. Type the required criteria in the criteria
7. Run the query.

### 4. Adding criteria to a query.

1. Open your query in Design view.
2. In the query design grid, click the Criteria row of the field where you want to add the criterion.

## MICROSOFT ACCESS

3. Add the criteria and press ENTER. ...
4. Click Run to see the results in Datasheet view.

## CREATING FORMS

1. Creating a simple Form,
2. Creating a Form using Form Wizard,
3. Creating a Form using Design View,
4. Sorting data within a Form,
4. Filtering data within a Form.

### 1. Creating a simple form

1. To create a form from a table or query in your database, in the Navigation Pane, click the table or query that contains the data for your form, and
2. On the **Create** tab, click **Form**.
3. Access creates a form and displays it in Layout view.
4. You can make design changes like adjusting the size of the text boxes to fit the data, if necessary.

### 2. Creating a Form using Form Wizard

1. On the **Create** tab, in the **Forms** group, click **Form Wizard**.
2. Follow the directions on the pages of the Form Wizard.
3. On the **Create** tab, in the **Forms** group, click **Form Wizard**.
4. Follow the directions on the pages of the Form Wizard.

### 3. Creating a Form using Design View

1. In the Navigation pane, select the table you want to use to create a form. ...
2. Select the **Create** tab, locate the **Forms** group, then click the **Form** command.
3. Your form will be created and opened in Layout view.
4. To save the form, click the **Save** command on the Quick Access Toolbar.

### 4. Sorting data within a Form.

1. Open the form in Design View.
2. Select the section containing the data you want to sort.
3. Go to the "Design" tab on the Ribbon.
4. Click on the "Sorting & Grouping" button.
5. Specify the sorting criteria in the Sorting and Grouping dialog box.
6. Click "OK" to apply the sorting.
7. Save your form design changes.
8. Switch to Form View to see the sorted data.

### 5. Filtering data within a Form.

1. Open the form that contains the data you want to filter in Microsoft Access.
2. While in Form View, go to the "Home" tab on the Ribbon. In the "Sort & Filter" group, you'll find the "Advanced" button. Click on the drop-down arrow next to it, and then select "Filter by Form".
3. Access will change to Filter by Form mode. In this mode, the form will display empty fields or controls where you can enter filter criteria. Enter the criteria you want to use for filtering the data. You can use operators such as "=", "<>", ">", "<", ">=", "<=", etc., and you can also use wildcards like "\*" for partial matches.
4. After entering the filter criteria, you can apply the filter by clicking the "Toggle Filter" button in the "Sort & Filter" group on the Ribbon. Alternatively, you can press the "Ctrl + F" shortcut key. Access will filter the records based on the criteria you entered.
5. To clear the filter and display all records again, click the "Toggle Filter" button again, or press "Ctrl + F". This will remove the filter, and all records will be displayed again.

## MICROSOFT ACCESS

### CREATING REPORTS

1. CREATING A SIMPLE REPORT,
2. CREATING REPORT USING REPORT WIZARD,
3. CREATING REPORTS USING DESIGN VIEW

#### 1.. CREATING A SIMPLE REPORT

1. Launch Microsoft Access and open the database that contains the data you want to create a report for.
2. In the Access Ribbon, click on the "Create" tab. You'll find the "Reports" group here.
3. Before creating a report, you need to decide which data source you want to use. You can base your report on a table or a query.
3. To create a new report, click on the "Report" button in the "Reports" group. Access will create a new blank report in Layout view. Which allows you to design the appearance of your report. From the "Design" tab on the Ribbon, you can add fields from your data source to the report by dragging and dropping them onto the report layout.
4. You can format the report to make it more visually appealing and easier to read. You can adjust font styles, sizes, colors, alignments, and borders using the formatting tools in the "Design" tab.
5. Arrange the fields and labels on the report layout as per your preference. You can resize and move the controls to achieve the desired layout.
6. Once you've added fields and formatted the report, switch to "Report View" by clicking the "View" button in the bottom-right corner of the Access window. This allows you to see how the report will look when printed or viewed by others.
7. After designing and previewing your report, save it by clicking the "Save" button in the Quick Access Toolbar or by pressing "Ctrl + S". Give your report a meaningful name.
8. Close the Report: Once saved, you can close the report design view by clicking the "Close" button in the top-right corner of the Access window.

#### 2. CREATING REPORT BY USING WIZARD

1. Navigate to the Reports Tab: In the Access Ribbon, click on the "Create" tab. You'll find the "Reports" group here.
2. Within the "Reports" group, click on the "Report Wizard" button. This will launch the Report Wizard.
3. The Report Wizard will prompt you to select a table or query from which to base your report. Choose the appropriate table or query that contains the data you want to include in the report, and then click "OK".
4. In the next step, you'll be presented with a list of fields from the selected table or query. Select the fields you want to include in the report by double-clicking on them or by clicking on them and then clicking the right arrow button to move them to the "Selected Fields" list. You can also use the ">>" button to select all fields.
5. If you want to group your data by a specific field, you can choose a grouping level in this step. This is optional. If you don't want to group your data, simply click "Next".
6. Choose how you want your data to be sorted in the report. You can select up to four sorting options. Click on a field in the "Available Fields" list and use the up and down arrows to set the sorting order. Click "Next" when you're done.
7. Select a layout style for your report. You can choose from Tabular, Columnar, Datasheet, or Justified. Click "Next" to proceed.
8. Choose a style for your report. Access provides several predefined styles for your report. Select a style from the list, and then click "Next".
9. Enter a title for your report. This title will appear at the top of the report. Click "Finish" to generate the report.

## MICROSOFT ACCESS

10. Once the Report Wizard has finished, Access will generate the report based on your selections. You can preview the report in Print Preview mode to see how it looks.

11. After reviewing the report, you can save it by clicking the "Save" button in the Quick Access Toolbar or by pressing "Ctrl + S". Give your report a meaningful name.

### 3. CREATING REPORTS USING DESIGN VIEW

1. In the Access Ribbon, click on the "Create" tab. You'll find the "Reports" group here.

2. Within the "Reports" group, click on the "Design View" button. This will open a new, blank report in Design View.

3. In Design View, you'll see the "Field List" pane on the right side of the screen. This pane displays all the tables and queries in your database. Expand the table or query that contains the fields you want to include in your report. Drag and drop the fields you want to include onto the report design grid.

4. Once you've added fields to the report design grid, you can arrange and format them as needed. Resize and move the controls to achieve the desired layout. You can also format the controls by changing font styles, sizes, colors, alignments, and borders.

5. If you want to group or sort your data in the report, you can do so by right-clicking on the report design grid and selecting "Grouping and Sorting". This will open the "Group, Sort, and Total" pane where you can specify grouping and sorting options.

6. You can add headers and footers to your report by right-clicking on the report design grid and selecting "Report Header/Footer" or "Page Header/Footer". Headers and footers are useful for adding titles, page numbers, dates, and other information to your report.

7. Once you've designed your report, you can preview it by clicking the "View" button in the bottom-right corner of the Access window and selecting "Print Preview". This allows you to see how the report will look when printed or viewed by others.

8. After designing and previewing your report, save it by clicking the "Save" button in the Quick Access Toolbar or by pressing "Ctrl + S". Give your report a meaningful name.