

Academic Writing Skills (Lab.)

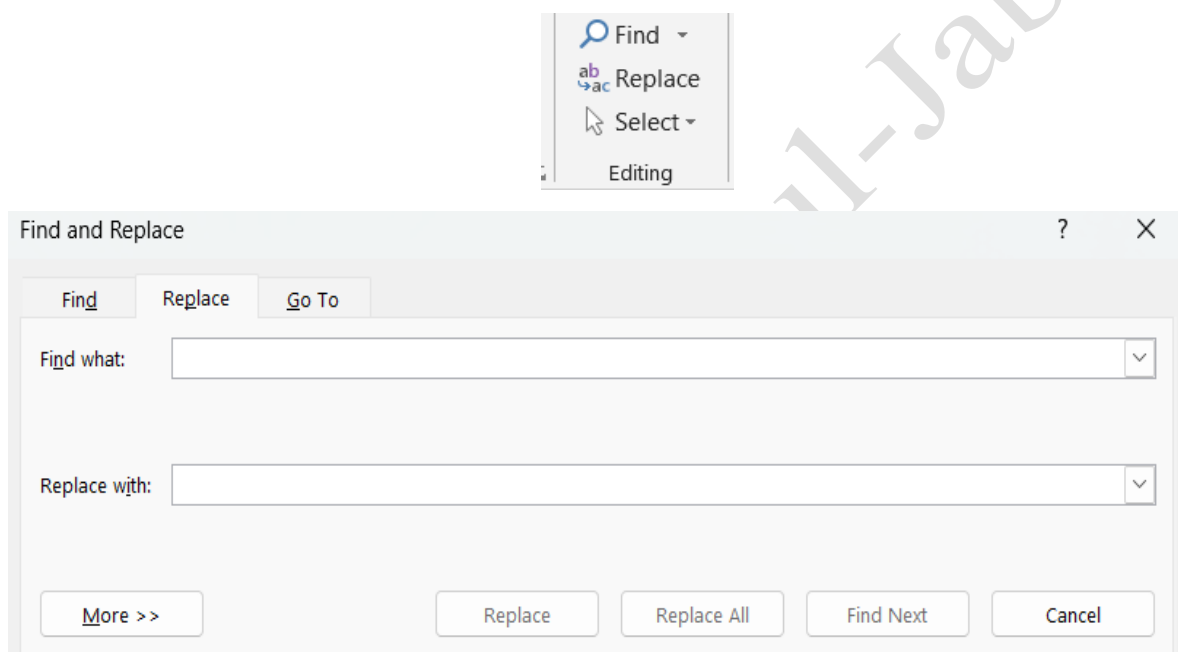
First Stage
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2024

1. Introduction

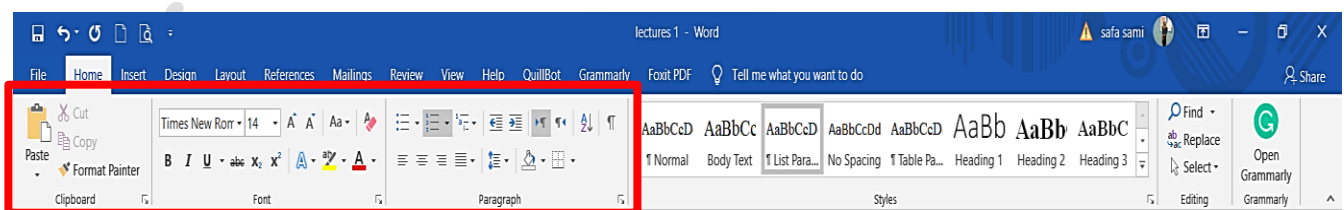
An examination of the concepts covered in the introductory computer skills course as they apply to the manipulation of Word documents.

2. Word Processing: Microsoft Word is primarily used for word processing tasks such as creating, editing, formatting, and printing documents.

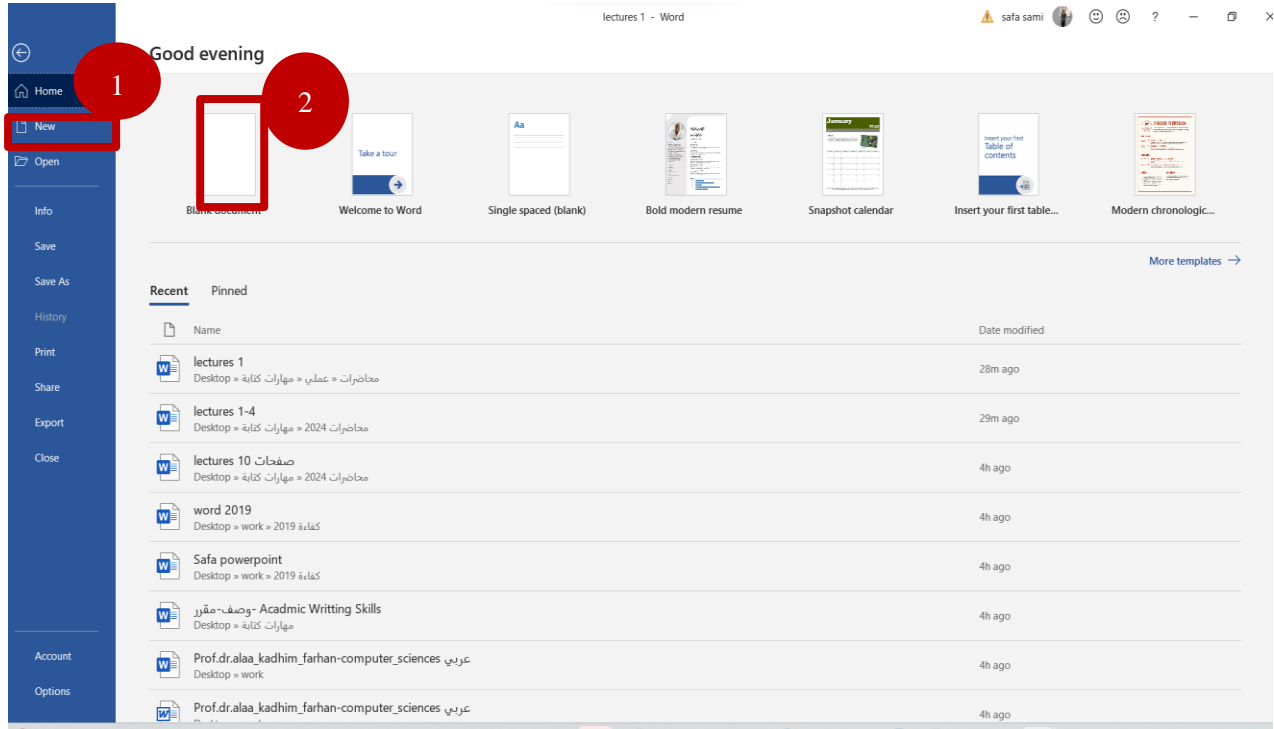
1- **Text Editing:** Microsoft Word offers a wide range of text editing features including spell check, grammar check (using Green Color), find and replace



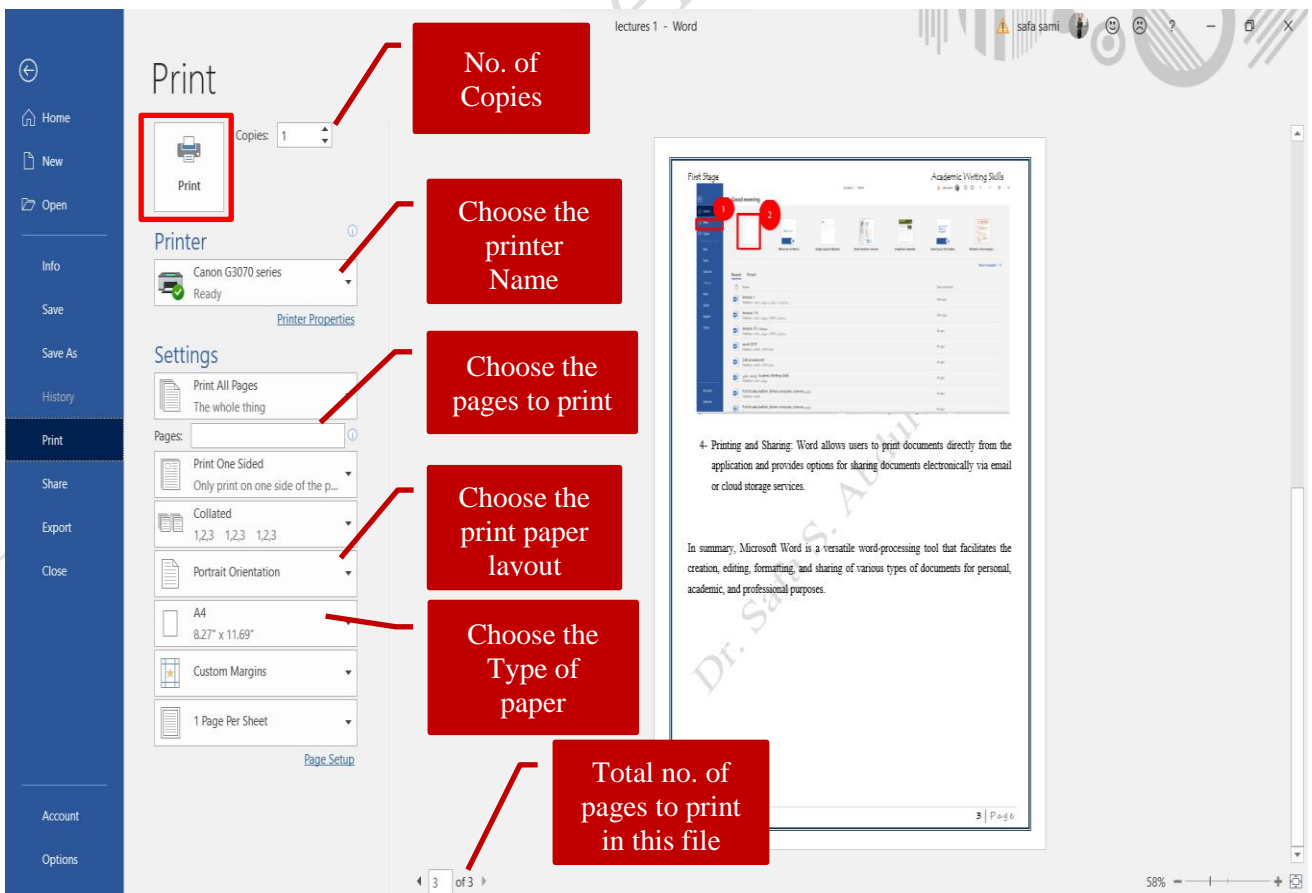
2- **Formatting:** Users can format text and paragraphs by changing fonts, sizes, styles, colors, alignment, and spacing to enhance the visual appearance of documents.



3- **Document Creation:** Microsoft Word allows users to create various types of documents including letters, resumes, reports, essays, newsletters, and more.



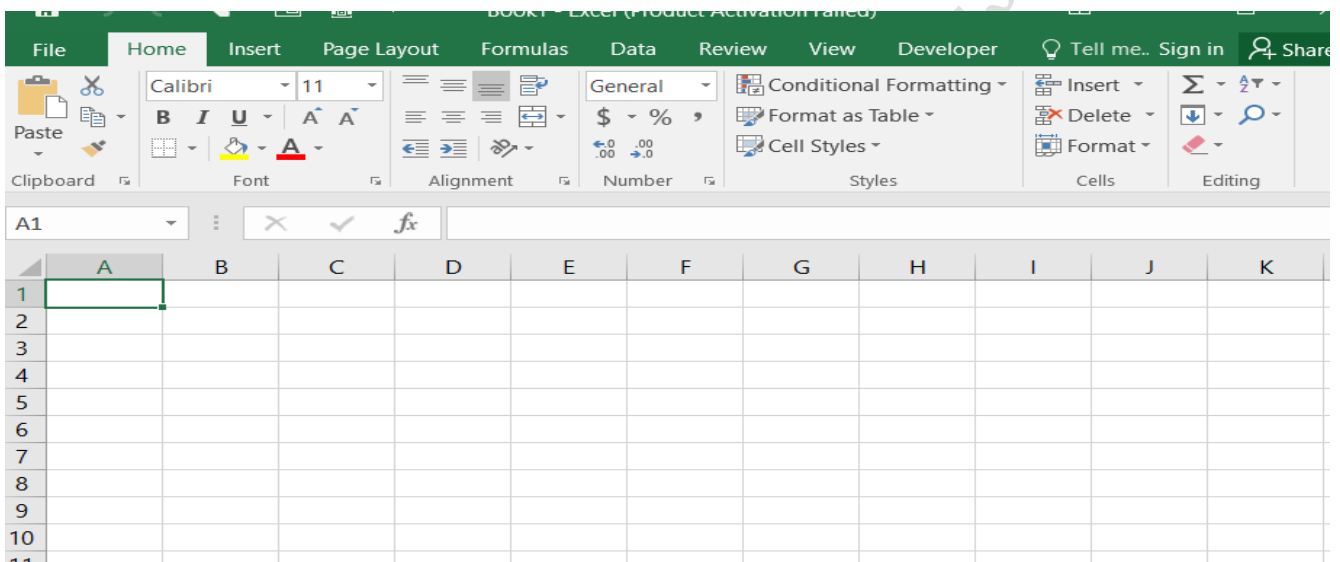
4- Printing and Sharing: Word allows users to print documents directly from the application and provides options for sharing documents electronically via email or cloud storage services.



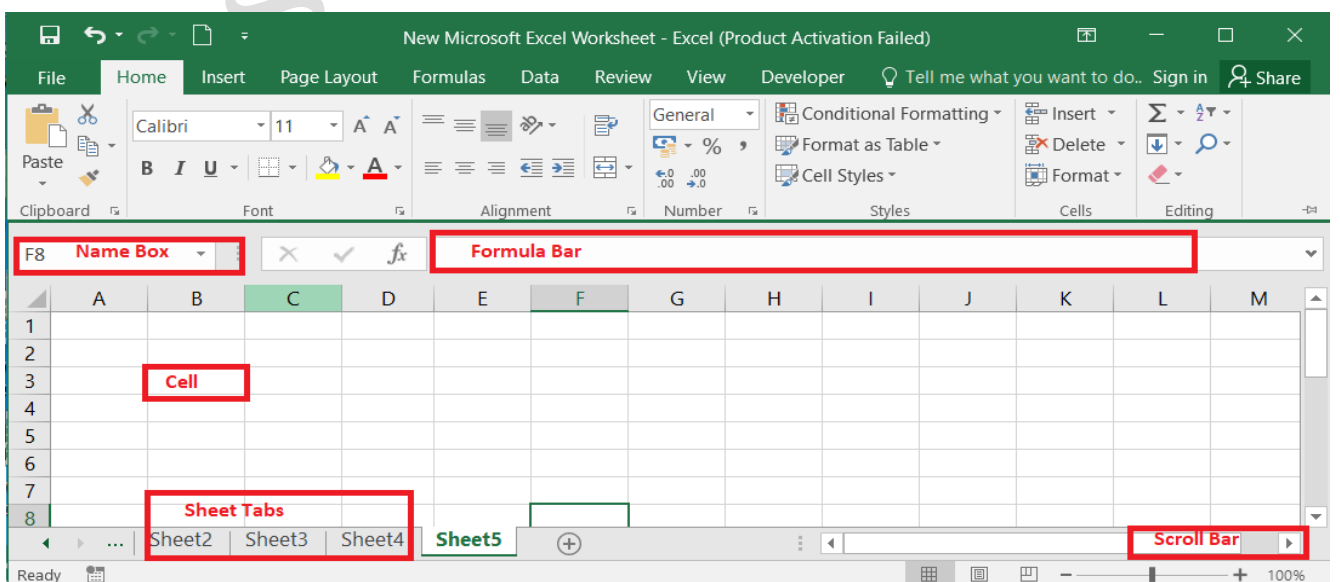
In summary, Microsoft Word is a versatile word-processing tool that facilitates the creation, editing, formatting, and sharing of various types of documents for personal, academic, and professional purposes.

3. What is MS Excel

Microsoft Excel is a software application designed for creating tables to input and organize data. It provides a user-friendly way to analyze and work with data. The image below provides a visual representation of what an Excel spreadsheet typically appears like

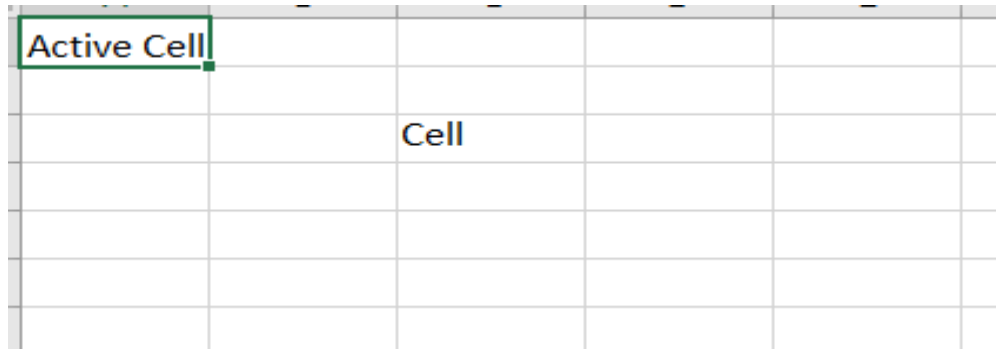


4. Excel Interface



5. What is a Cell

A spreadsheet takes the shape of a table, consisting of rows and columns. A cell is created at the intersection point where rows and columns meet, forming a rectangular box. Here's an image illustrating what a cell looks like:



6. What is a Cell Address or Cell Reference?

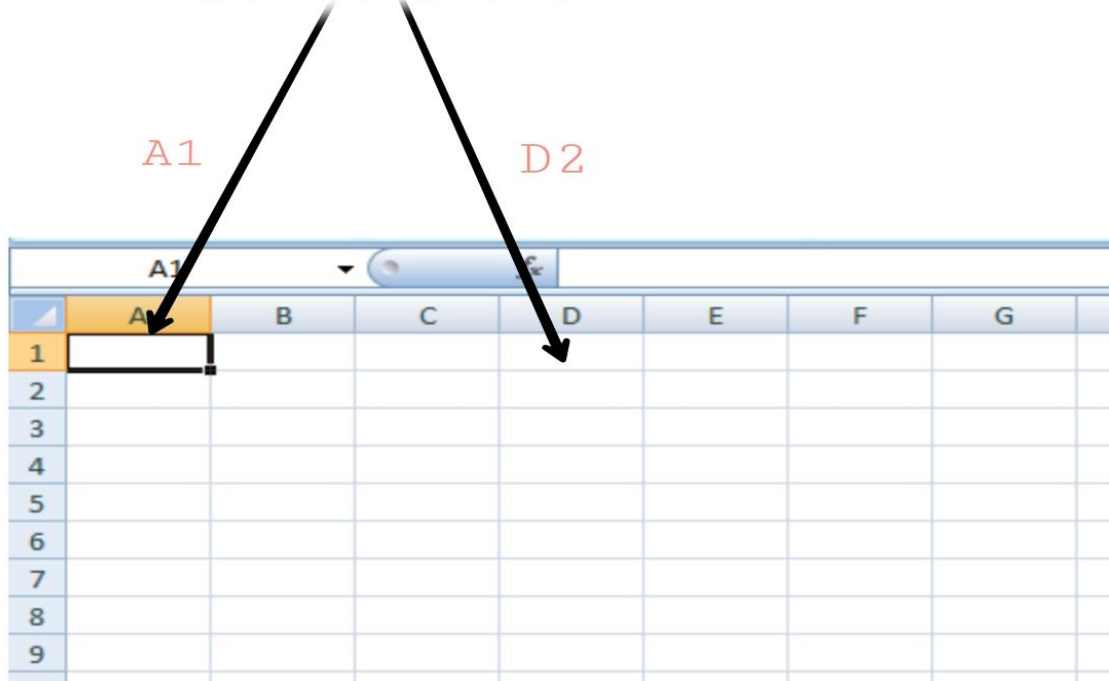
The address or name of a cell or a range of cells is known as a Cell reference. It helps the software to identify the cell from where the data/value is to be used in the formula. We can reference the cell of other worksheets and also of other programs.

- Referencing the cell of other worksheets is known as External referencing.
- Referencing the cell of other programs is known as Remote referencing.

There are three types of cell references in Excel:

1. Relative reference.
2. Absolute reference.
3. Mixed reference.

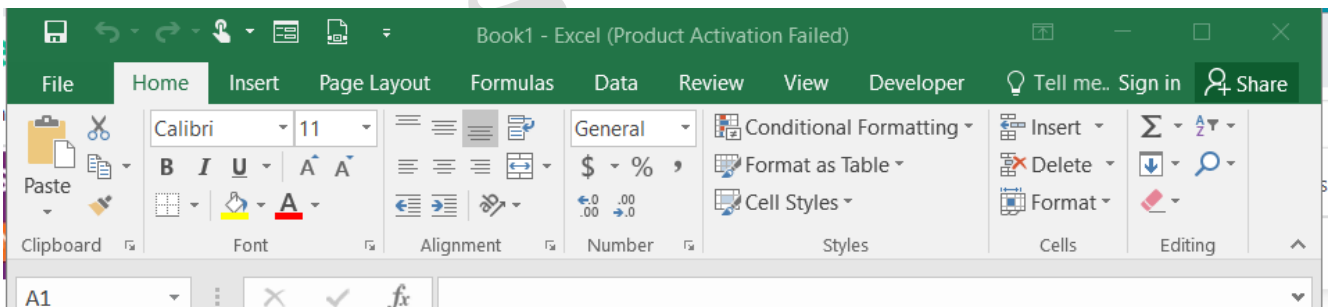
Cell reference



7. Features of MS Excel

- Ribbon

The Ribbon in MS-Excel is the topmost row of tabs that provide the user with different facilities/functionalities. These tabs are:



- Home Tab

It provides basic facilities like changing the font, and size of text, editing the cells in the spreadsheet, auto sum, etc.

- Insert Tab

It provides the facilities like inserting tables, pivot tables, images, clip art, charts, links, etc.

- Page layout

It provides all the facilities related to the spreadsheet-like margins, orientation, height,

width, background etc. The worksheet appearance will be the same in the hard copy as well.

- **Formulas**

It is a package of different in-built formulas/functions which can be used by the user just by selecting the cell or range of cells for values.

- **Data**

The Data Tab helps to perform different operations on a vast set of data like analysis through what-if analysis tools and many other data analysis tools, removing duplicate data, transposing the row and column, etc. It also helps to access data(s) from different sources as well, such as from Ms-Access, from the web, etc.

- **Review**

This tab provides the facility of thesaurus, checking spellings, translating the text, and helps to protect and share the worksheet and workbook.

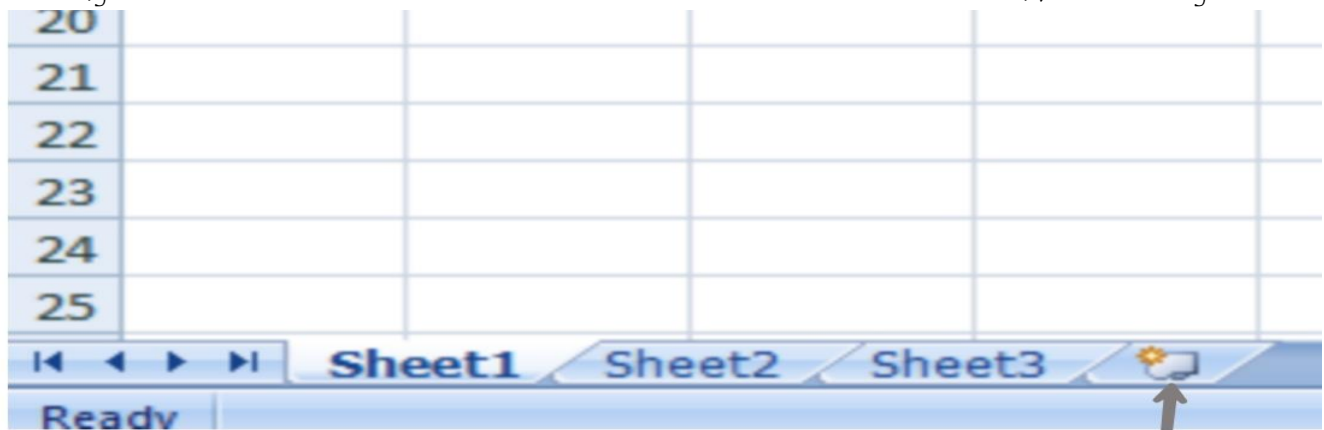
- **View**

It contains the commands to manage the view of the workbook, show/hide ruler, gridlines, etc, freezing panes, and adding macros.

8. How to Create a New Spreadsheet

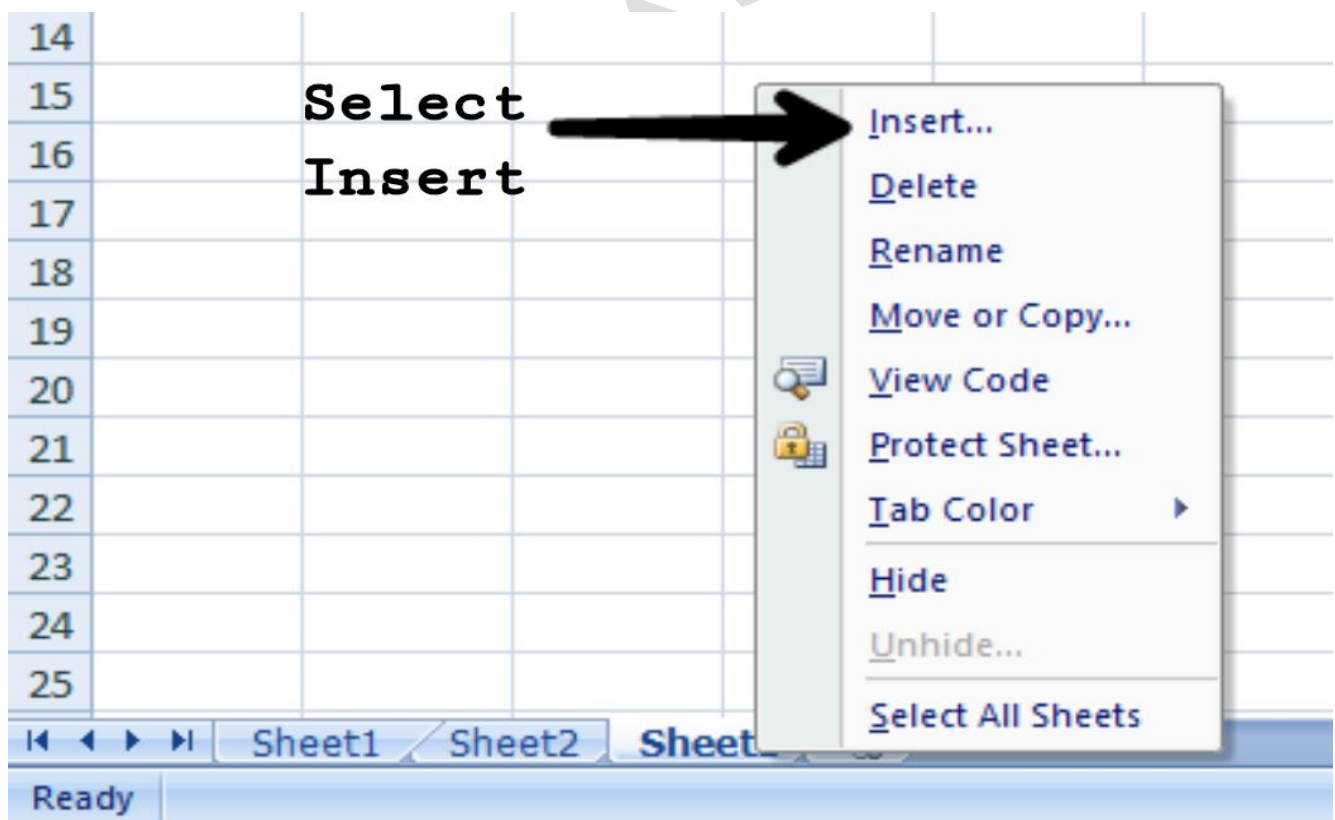
In Excel, 3 sheets are already opened by default, now to add a new sheet:

- In the lowermost pane in Excel, you can find a button.
- Click on that button to add a new sheet.

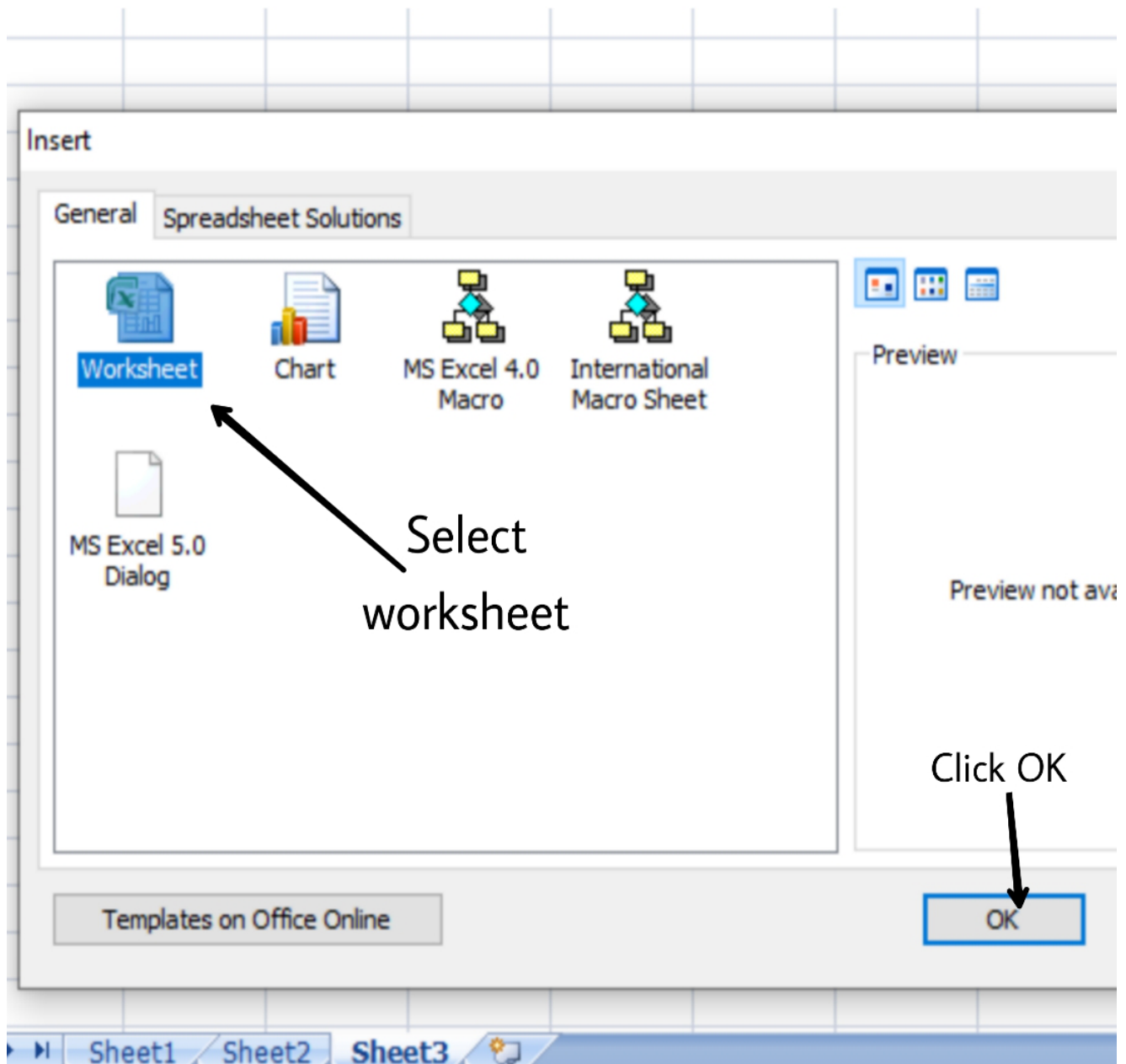


Click to add a new sheet

- We can also achieve the same by Right-clicking on the sheet number before which you want to insert the sheet.
- Click on Insert.



- Select Worksheet.
- Click OK.

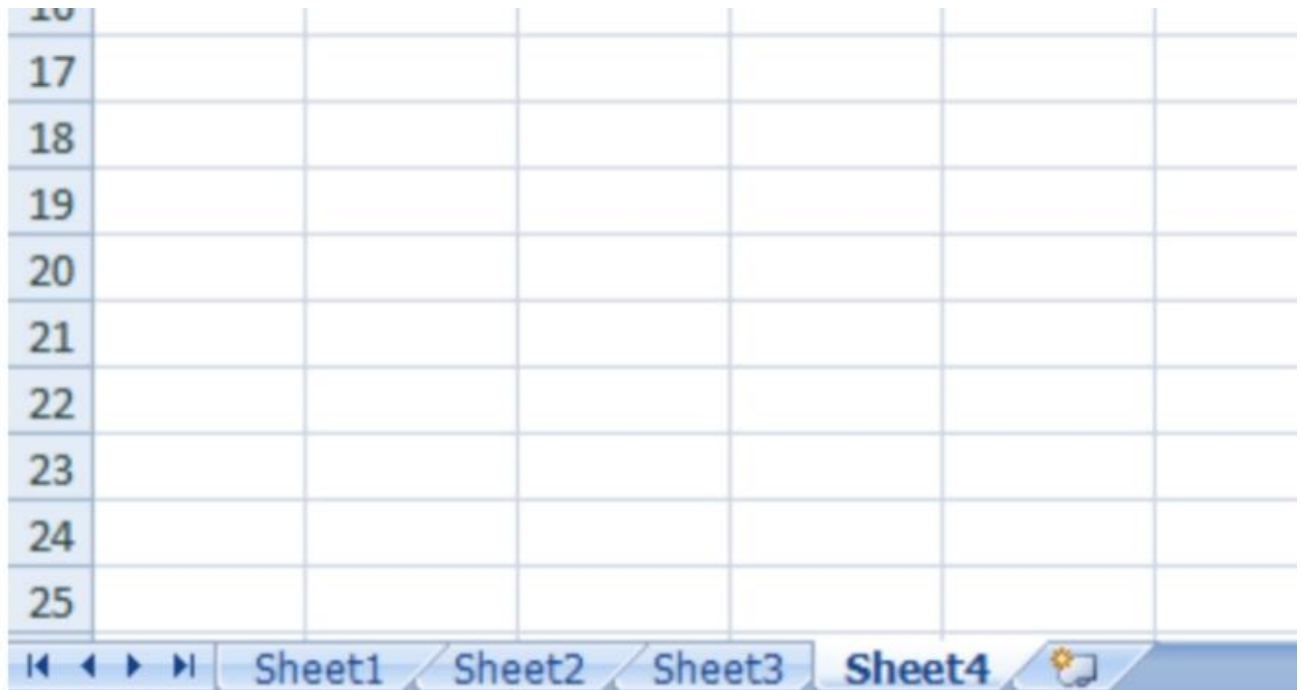


9. How to Open an Existing Worksheet

On the lowermost pane in Excel, you can find the name of the current sheet you have opened.

On the left side of this sheet, the names of previous sheets are also available like Sheet 2, Sheet 3 will be available at the left of sheet 4, click on the number/name of the sheet you want to open and the sheet will open in the same workbook.

For example, if we are on Sheet 4, and we want to open Sheet 2 then simply just click on Sheet2 to open it.

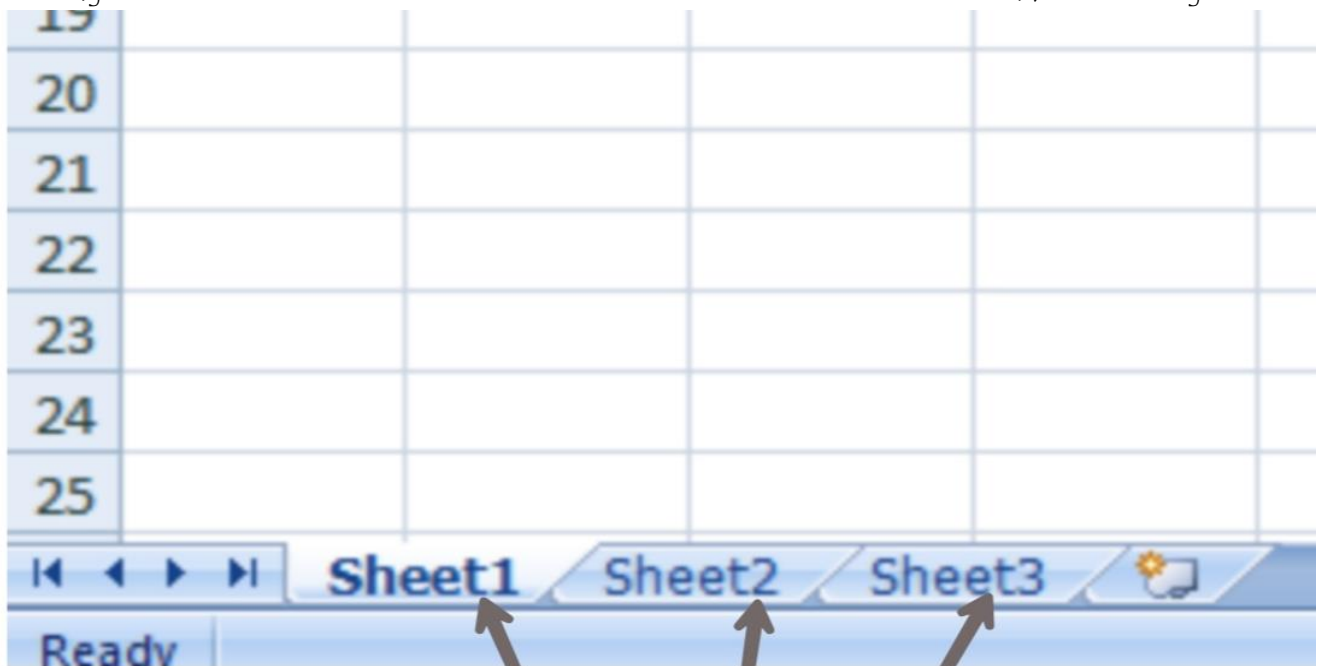


**Click to
open Sheet2**

10. Managing the Spreadsheets

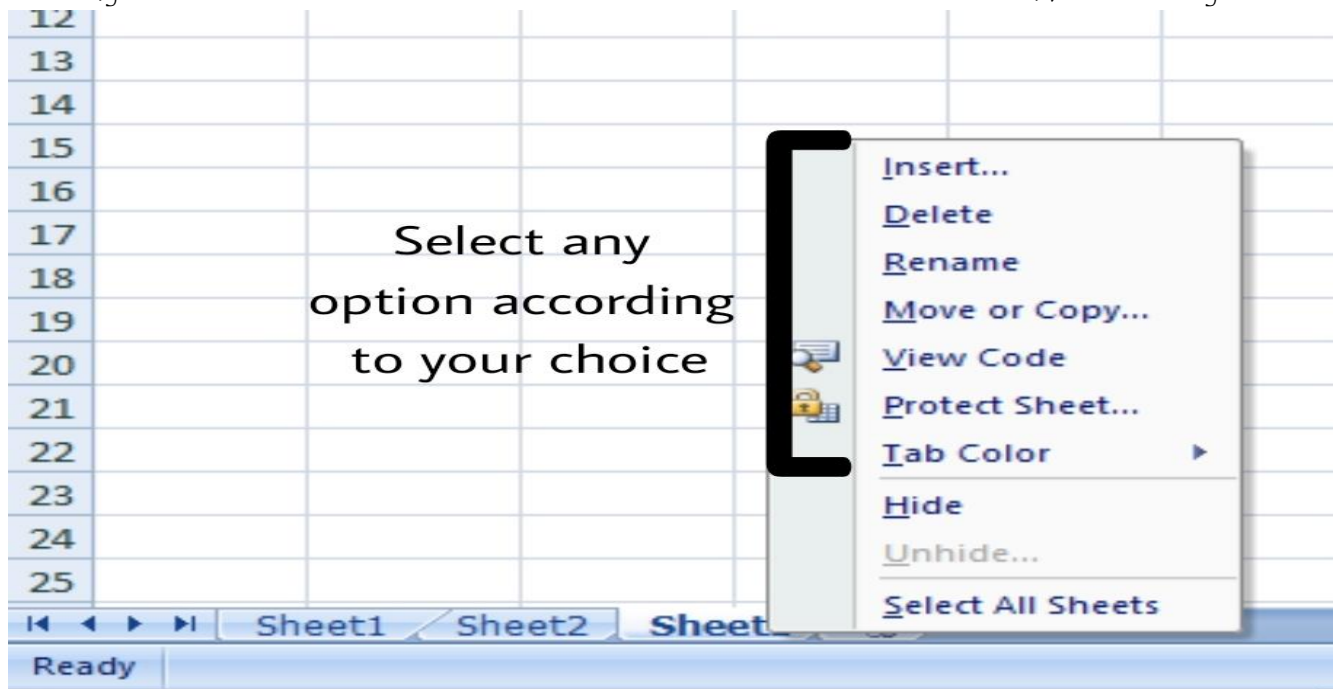
You can easily manage the spreadsheets in Excel simply by:

- Simply navigating between the sheets.



**Click to
navigate between
the sheets**

- Right-clicking on the sheet name or number on the pane.
- Choose among the various options available like, move, copy, rename, add, delete etc.
- You can move/copy your sheet to other workbooks as well just by selecting the workbook in the *to workbook* and the sheet before you want to insert the sheet in *Before sheet*.



11. How to Save the Workbook

- Click on the Office Button or the File tab.
- Click on Save As option.
- Write the desired name of your file.
- Click OK.

12. How to Share your Workbook

- Click on the Review tab on the Ribbon.
- Click on the share workbook (under Changes group).
- If you want to protect your workbook and then make it available for another user then click on Protect and Share Workbook option.
- Now check the option “*Allow changes by more than one user at the same time. This also allows workbook merging*” in the Share Workbook dialog box.
- Many other options are also available in the Advanced like track, update changes.
- Click OK.

13. Functions in Excel

Explore the following comprehensive explanations and examples of common equations and functions in Excel, found under the 'Formulas' tab:

a) **SUM** Function:

Explanation: Adds up values in a range of cells.

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

Example: =SUM (A1:A5) adds up the values in cells A1 through A5.

b) **AVERAGE** Function:

Explanation: Calculates the average of values in a range of cells.

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

Example: =AVERAGE (B1:B10) calculates the average of values in cells B1 through B10.

c) **IF** Function:

Explanation: Performs a logical test and returns one value if the condition is true and another value if the condition is false.

Syntax: =IF (logical_test, value_if_true, value_if_false)

Example: =IF(C1>10, "Yes", "No") checks if the value in cell C1 is greater than 10. If true, it returns "Yes"; otherwise, it returns "No".

d) **VLOOKUP** Function:

Explanation: Searches for a value in the first column of a table array and returns a value in the same row from another column.

Syntax: =VLOOKUP (lookup_value, table_array, col_index_num, [range_lookup])

Example: =VLOOKUP (A2, \$B\$2 : \$D\$10, 3, FALSE) searches for the value in cell A2 in the first column of the table array B2:D10. It returns the value from the third column of the table.

e) **COUNT** Function:

Explanation: Counts the number of cells in a range that contain numbers.

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

Example: =COUNT (F1:F100) counts the number of cells in the range F1:F100 that contain numerical values.

f) **MAX** Function:

Explanation: Returns the largest value in a set of values.

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

Example: =MAX (G1:G20) returns the largest value in the range G1:G20.

g) **MIN** Function:

Explanation: Returns the smallest value in a set of values.

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

Example: =MIN (H1:H15) returns the smallest value in the range H1:H15.

These are just a few examples of the many functions and formulas available in Excel for data analysis, manipulation, and presentation. Each function serves a specific purpose and can be customized to meet the requirements of various tasks and analyses.

Dr. Safa S. Abdul-Jabbar