PENTAWISE

Knowledge . Solution

MICROSOFT EXCEL ESSENTIAL

Date : 14 – 15 May 2026

Instructor : Theresa Morgis

Table of Contents

Module 1 ..... **1**
Introduction to Excel **1**
The Excel Interface 1
The Quick Access Toolbar 2
Workbooks 2
Module 2 ..... **4**
Working with Excel Worksheet **4**
Entering and Editing Data 4
AutoFill 6
Custom Lists 6
Module 3 ..... **8**
Introduction to Formulas and Functions **8**
Operator Precedence 8
Cell Reference 9
Basic Formulas 9
Module 4 ..... **10**
Data Validation **10**
Settings 10
Input Message 11
Error Alert Tab 12
Validation Drop-down List 13
Module 5 ..... **15**
Conditional Formatting **15**
Highlight Cells Rules 17
Top/ Bottom Rules 26
Data Bars 28
Icon Sets 29
Editing Excel Conditional Formatting Rules 30
Module 6 ..... **32**
Managing Multiple Worksheets **32**
Why Use Multiple Worksheet 32
Essential Techniques 32
Worksheet shortcuts 33
Freeze Panes 33
Viewing Multiple Worksheets 34
Grouping Worksheets 34
Module 7 ..... **35**
Printing **35**
Setting up your Worksheets 35
Page Breaks 35
Setting Page Orientation 36
Setting Margins 36
Setting Headers and Footers 37
Setting a Print Area 38
Print Titles 38
The Scale To Fit 38
Sheet Options 39
Previewing your Worksheet 39
Printing your Worksheet 39
Module 8 ..... **40**
Basic Skills for Charting **40**
What is a Chart? 40

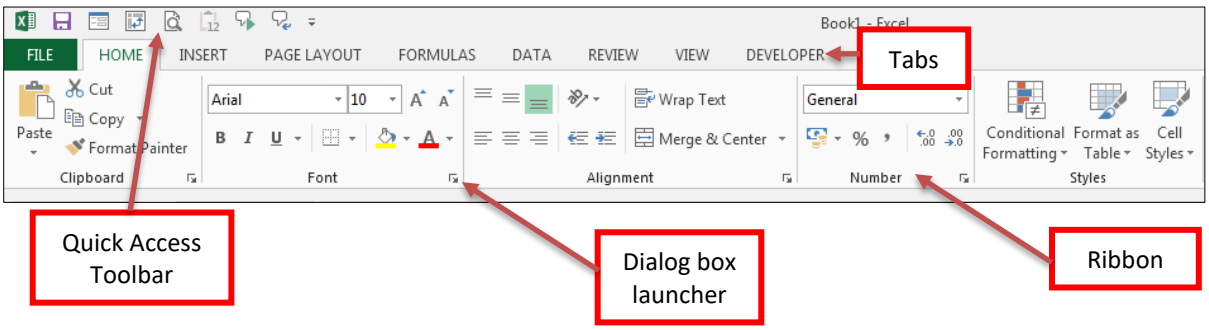
Choosing the Right Chart Type 40
Excel ’s Recommended Chart 41
Inserting A Chart 42
Elements of a Chart 43
Chart Styles (Formatting a Chart) 43
3-D Charts 53
Adding percentages to Pie Chart. 54
Module 9 55
Passwords and Common Keyboard Shortcut Keys 55
Protecting Your Files and Worksheets 55
Using Templates in Excel 59
Shortcuts in Spreadsheets 59

Module 1

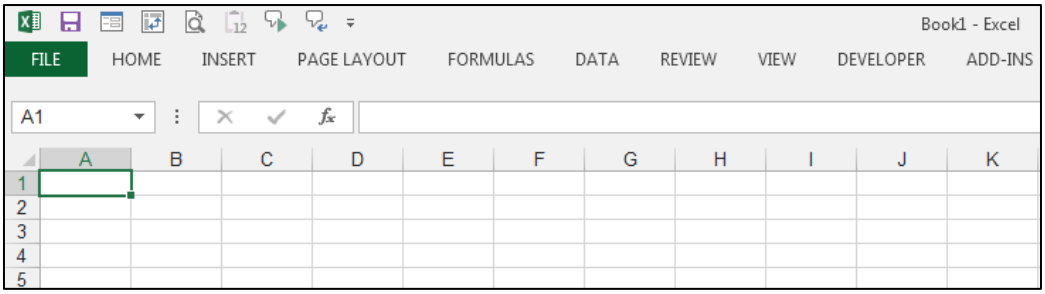
Introduction to Excel

The Excel Interface

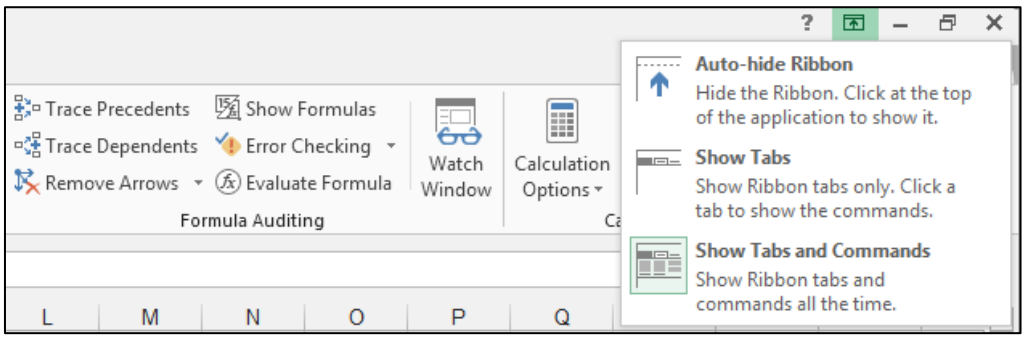
Excel's commands are located in different Tabs. You have the File, Home, Insert, Page Layout, Formulas, Data, Review, View and Developer tabs. The space where the commands are located is call the ribbon.



Double clicking on any tab will toggle the Auto Hide Ribbon. Below shows the ribbon being hidden. This gives you a bigger view of the worksheet. Clicking on the tab will temporary displays the ribbon. Double clicking on it again will turn it permanently on.

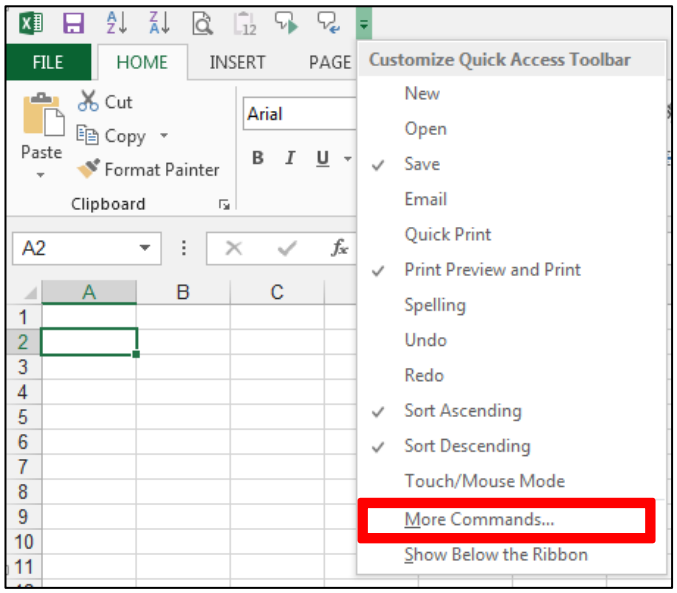


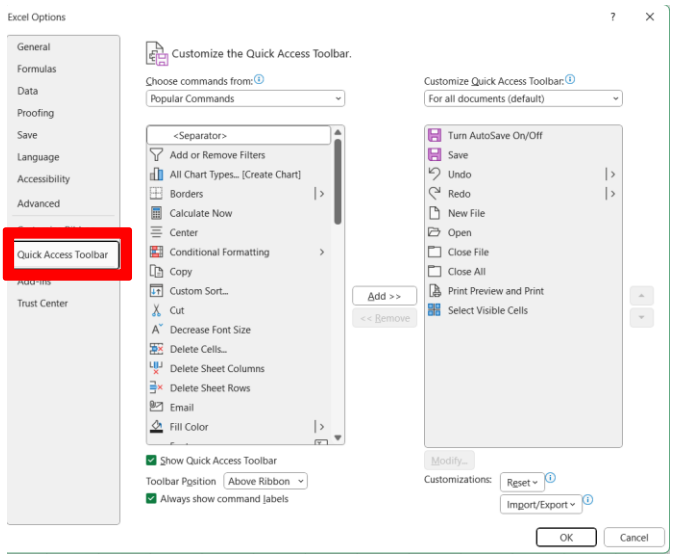
Alternatively you can also up arrow beside the minimize button to change the ribbon setting to Auto hide or to show tabs only.



The Quick Access Toolbar

This is a convenient place to put the commands that are frequently used. To customize it, click the more button (this is the little arrow at the end) and select the commands that you need.





Workbooks



Saving Workbooks

Save

Ctrl + S

Saves changes to the current file

Save As

F12

Save a copy with a new name or format

AutoSave

Toggle On

Automatically saves to the cloud

Moving Between Workbooks

Taskbar

Click the file icon in the taskbar to switch

Keyboard

Ctrl + Tab to cycle through open files

View Tab

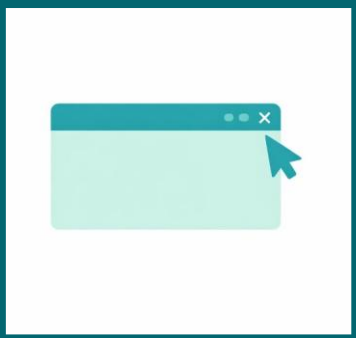
View > Switch Windows > select file

Arrange All

View > Arrange All to see side by side



Closing Workbooks



Close Button

Click the X button at the top-right corner of the window

File Menu

File > Close to close just the current file

Keyboard Shortcut

Ctrl + W closes the active workbook

Save Prompt

You will be asked to save if there are unsaved changes

Module 2

Working with Excel Worksheet

Entering and Editing Data

Data Entry Basics

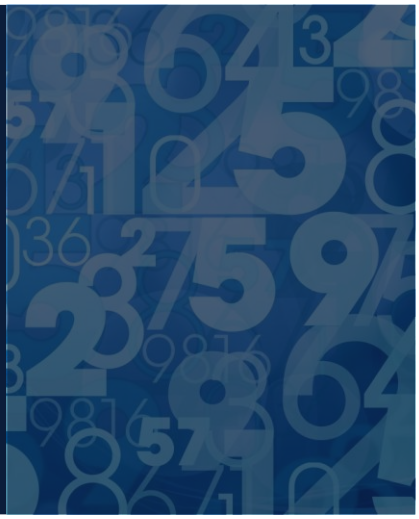
Understanding what goes into your cells

Data Type	Example	Key Tip
Text	`"Sales Report"`	Left-aligned by default. Use for labels and headers.
Numbers	`1500, 3.14`	Right-aligned by default. Used in calculations.
Dates	`04/29/2026`	Stored as numbers internally. Enables date math.
AutoFill	`Mon, Tue, Wed...`	Drag the fill handle to auto-complete patterns.

Formatting Numbers

Step-by-Step

1. **Select the cells**
   Highlight the cells containing numbers you want to format
2. **Open Format Cells**
   Press Ctrl+1 or right-click > Format Cells for full options
3. **Choose a category**
   Pick Number, Currency, Percentage, Date, or Custom from the list
4. **Set decimal places**
   Adjust decimal places (e.g., 2 for currency). Check 'Use 1000 Separator'
5. **Quick formats on ribbon**
   Use the $ (Currency), % (Percent), and comma buttons on the Home tab
6. **Verify your data**
   Check that numbers still calculate correctly after formatting changes



Formatting Text

Step-by-Step

1. **Select Your Cells**
   Click a cell or drag to select a range of cells you want to format
2. **Change the Font**
   Go to Home tab > Font group. Pick a font from the dropdown (e.g., Calibri, Arial)
3. **Adjust Font Size**
   Use the size dropdown or type a number. Shortcut: Ctrl+] to increase, Ctrl+[to decrease
4. **Apply Bold, Italic, Underline**
   Click B, I, or U buttons on the toolbar. Shortcuts: Ctrl+B, Ctrl+I, Ctrl+U
5. **Change Font Color**
   Click the Font Color dropdown (A with colored bar). Pick from theme or custom colors
6. **Set Alignment**
   Choose Left, Center, or Right alignment. Use Merge & Center for headers spanning columns

Formatting Dates

Dates are stored as serial numbers — formatting controls how they display

1. **Enter a date in any format**
   4/29/2026, April 29 2026, or 29-Apr-2026 — all recognized automatically
2. **Select and press Ctrl+1**
   Opens Format Cells dialog. Go to the Number tab > Date category
3. **Choose a display format**
   Short: 4/29/2026, Long: April 29, 2026, Custom: "dd-MMM-yyyy" = 29-Apr-2026
4. **Use Custom formats**
   "mmm-yy" shows Apr-26, "dddd" shows Wednesday. Combine freely for any layout
5. **Date arithmetic**
   =TODAY()-A1 gives days elapsed.
   =DATEDIF(A1,B1,"m") gives months between dates
6. **Watch for text dates**
   If a date is left-aligned, it may be stored as text. Use DATEVALUE() to convert

Copy, Cut & Paste

Essential clipboard operations

Copy

`Ctrl + C`

- Select the cell(s) you want to copy
- Press Ctrl+C (or right-click > Copy)
- A dotted border appears around the selection
- Navigate to the destination cell
- Press Ctrl+V to paste

Cut

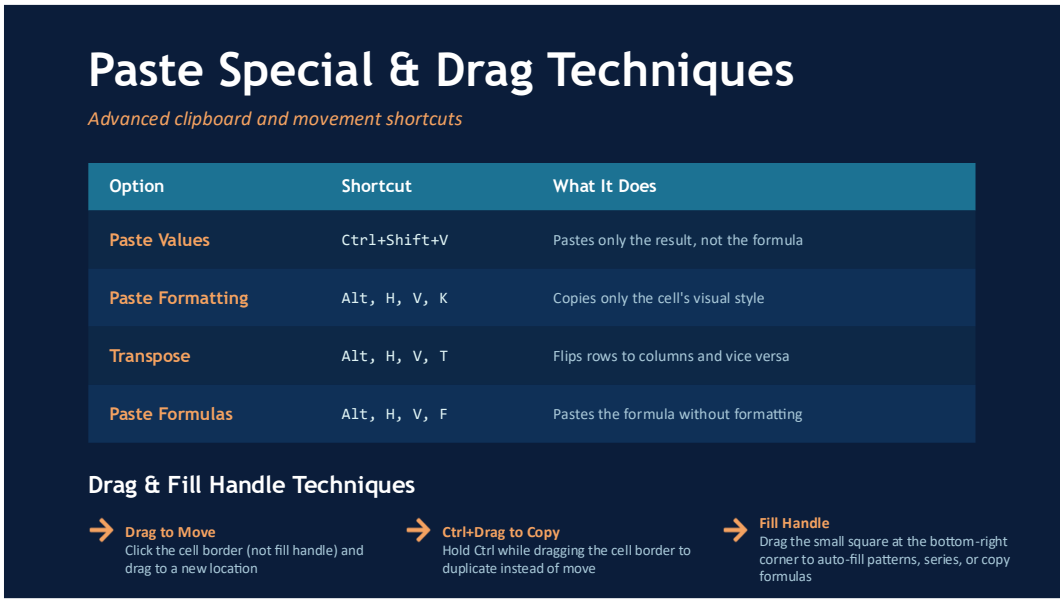
`Ctrl + X`

- Select the cell(s) to move
- Press Ctrl+X (or right-click > Cut)
- The selection shows a moving dashed border
- Click the destination cell
- Press Ctrl+V — original cells are cleared

Paste

`Ctrl + V`

- After Copy or Cut, click destination
- Press Ctrl+V for standard paste
- Or click the Paste dropdown for options
- Press Esc to cancel the clipboard selection
- Paste replaces existing content in the cell



AutoFill

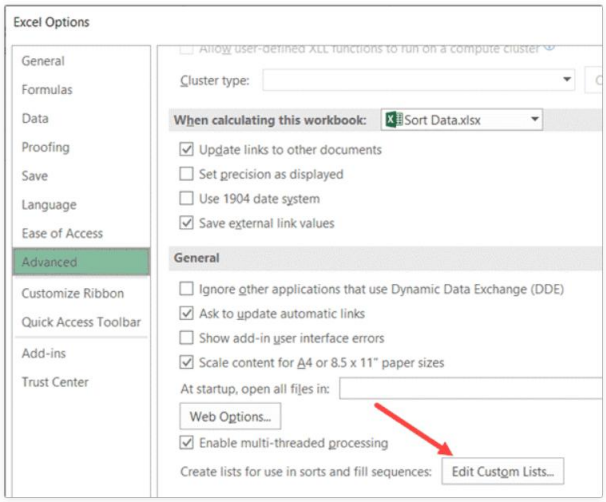
Initial selection	Extended series
1, 2, 3	4, 5, 6…..
9:00	10:00, 11:00, 12:00….
Mon	Tue, Wed, Thu...
Monday	Tuesday, Wednesday, Thursday...
Jan	Feb, Mar, Apr...
Jan, Apr	Jul, Oct, Jan...
Jan-07, Apr-07	Jul-07, Oct-07, Jan-08...
15-Jan, 15-Apr	15-Jul, 15-Oct,...
2007, 2008	2009, 2010, 2011...
1-Jan, 1-Mar	1-May, 1-Jul, 1-Sep...
Qtr3 (or Q3 or Quarter3)	Qtr4, Qtr1, Qtr2...
text1, textA	text2, textA, text3, textA...
1st Period	2nd Period, 3rd Period...
Product 1	Product 2, Product 3...

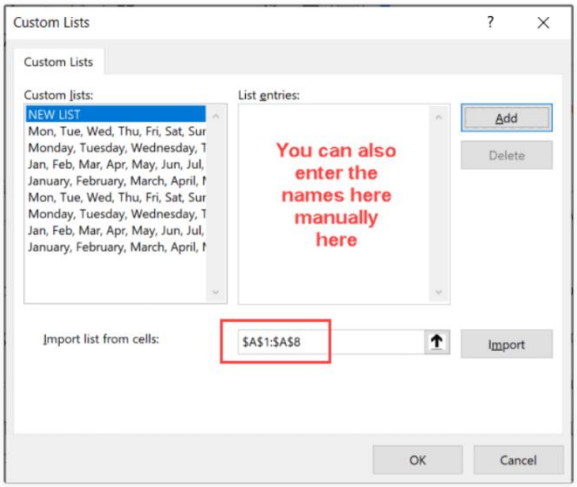
Custom Lists

It is also possible to customize the lists of data that work with Auto Fill so that you can easily add data that you use frequently. If you regularly add the same department names or part numbers to your spreadsheets you can add these names to the Auto Fill feature making it easier to enter them when needed.

1. To create your own Custom List, click on the File tab.

2. Then click on the Options button.


Excel Options
General
Formulas
Data
Proofing
Save
Language
Ease of Access
Advanced
Customize Ribbon
Quick Access Toolbar
Add-ins
Trust Center
Cluster type:
When calculating this workbook:
Sort Data.xlsx
Update links to other documents
Set precision as displayed
Use 1904 date system
Save external link values
General
Ignore other applications that use Dynamic Data Exchange (DDE)
Ask to update automatic links
Show add-in user interface errors
Scale content for A4 or 8.5 x 11" paper sizes
At startup, open all files in:
Web Options...
Enable multi-threaded processing
Create lists for use in sorts and fill sequences:
Edit Custom Lists...

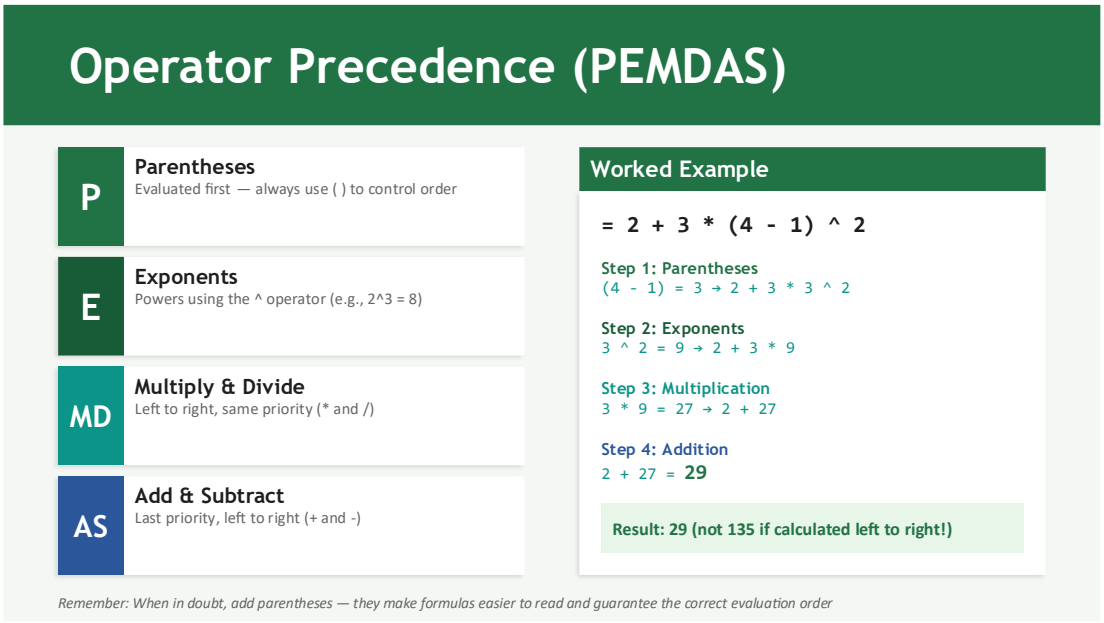

Custom Lists
Custom Lists
Custom lists:
NEW LIST
Mon, Tue, Wed, Thu, Fri, Sat, Sur
Monday, Tuesday, Wednesday, T
Jan, Feb, Mar, Apr, May, Jun, Jul,
January, February, March, April, M
List entries:
You can also enter the names here manually here
Add
Delete
Import list from cells:
$A$1:$A$8
Import
OK
Cancel

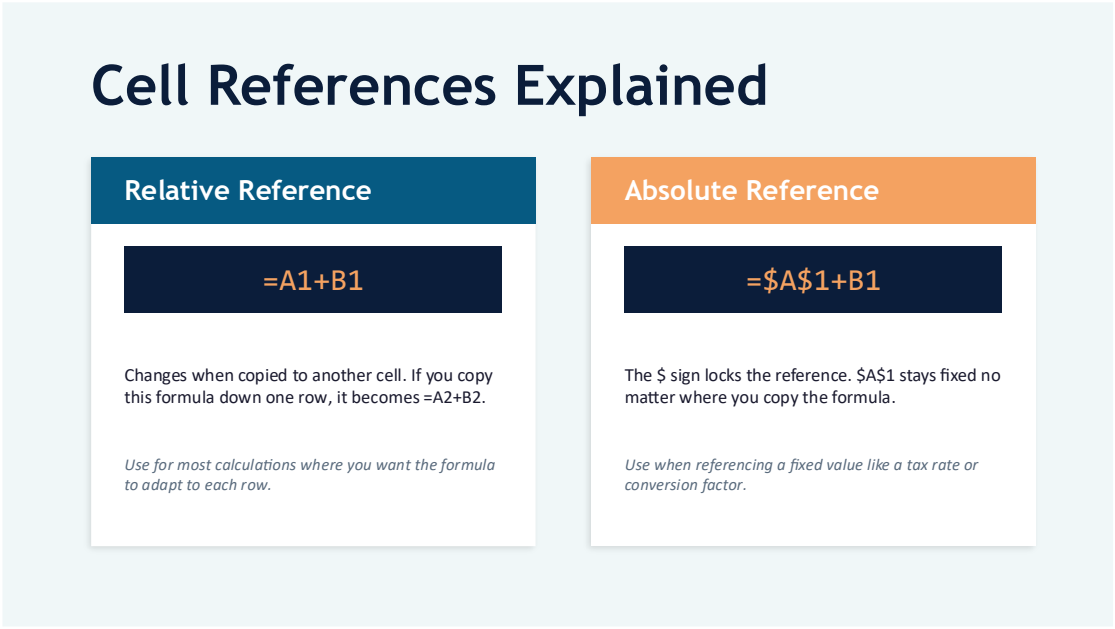
Module 3

Introduction to Formulas and Functions

Excel's true power lies in the ability to do math for us. Learning how to use basic math formulas sets the foundation for understanding how to compose much more complex functions. Using a few mathematical operators and rules for cell entry, you can turn your spreadsheet into a powerful calculator.

Operator Precedence





Cell Reference

Practice: Evaluate These Expressions

Apply PEMDAS rules to solve each expression. Work through the steps, then check your answer.

1

`= 10 - 2 * 3 + 4`

Hint: Multiply first, then add/subtract left to right

Answer: 8

2

`= (8 + 2) * 5 - 10`

Hint: Parentheses first, then multiply, then subtract

Answer: 40

3

`= 100 / (5 * 2) ^ 2`

Hint: Parentheses, then exponent, then divide

Answer: 1

⭐

CHALLENGE

`= 5 + 2^3 * (6-4) / 4`

Hint: All PEMDAS steps are needed here!

Answer: 9

Pro Tip: Try typing each formula into a spreadsheet cell to verify your answers. Use the Evaluate Formula tool (Formulas tab) to watch the step-by-step evaluation.

Basic Formulas

Your First Formulas

Every formula starts with =

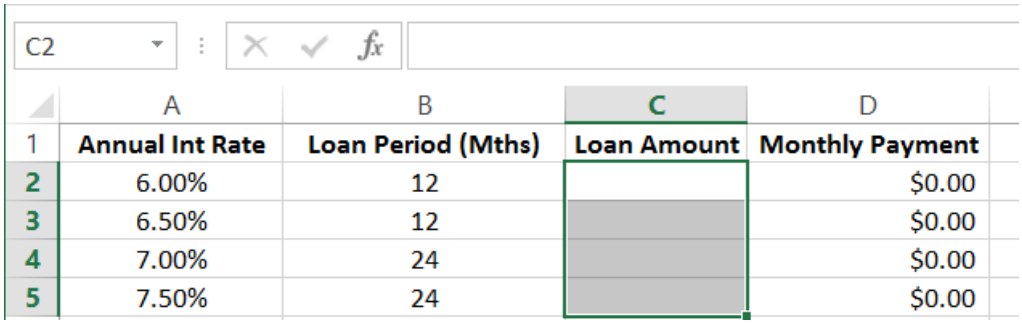
Formula	What It Does	Common Use
`=SUM(A1:A10)`	Adds all values in the range	*Totals, running sums*
`=AVERAGE(B1:B10)`	Calculates the mean value	*Performance metrics*
`=COUNT(C1:C10)`	Counts cells with numbers	*Data completeness*
`=MIN(D1:D10)`	Finds the smallest value	*Lowest score/price*
`=MAX(D1:D10)`	Finds the largest value	*Highest score/price*

Module 4

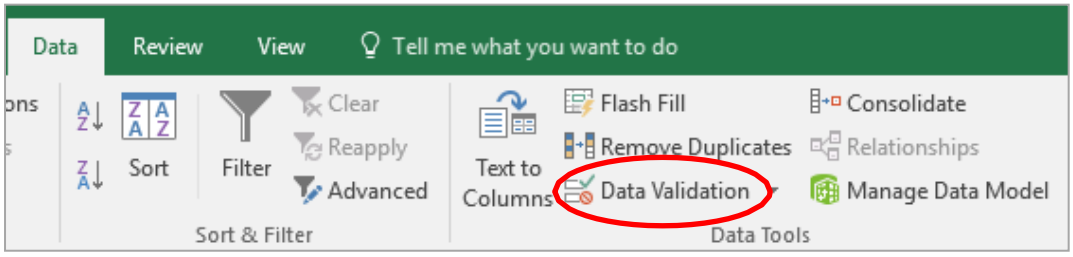
Data Validation

Data validation is used to control the type of data that users are able to input into a particular cell.

For example, if a cell requires only whole positive numbers, you can enforce this rule using data validation. To apply data validation to a particular cell or range of cells, you first need to select the cell(s) in question. For this example, select cells C2:C5:

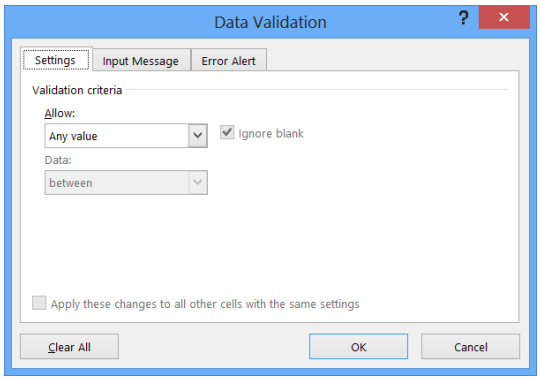


Next, click Data → Data Validation (not the drop-down):

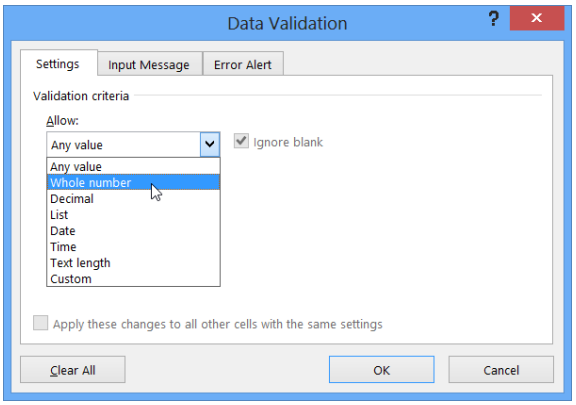


Settings

The Data Validation dialog will now be displayed:



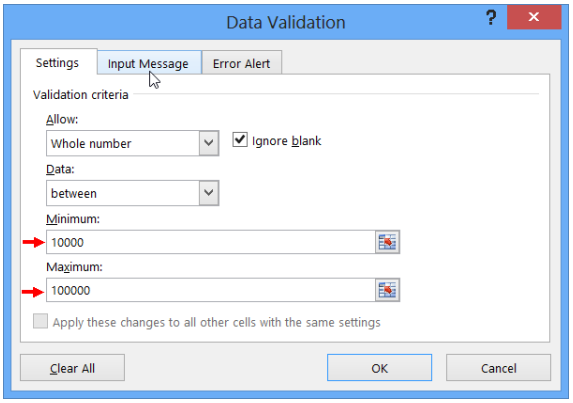
On the Settings tab of this dialog, you can use the Allow drop-down menu to select the type of data that you only want to allow in these selected cells. For this example, select "Whole number:"



After a specific data type has been specified, you can then tailor it even further. For example, when "Whole number" is selected, you specify a maximum or minimum value.

Input Message

For this example, enter 10000 as a minimum and 100000 as a maximum. Click the Input Message tab:

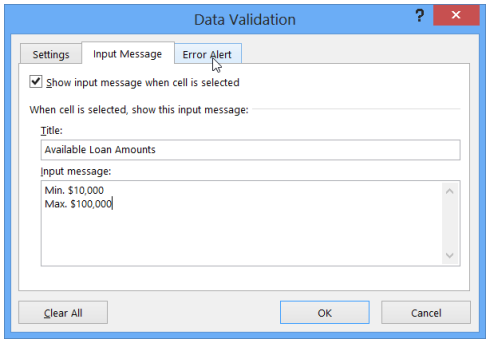


On the Input Message tab, you can specify the message that will be displayed when the cell with the validation rule is selected. This is a good place to explain the rules to workbook users.

Enter the title and input message shown in the image below.

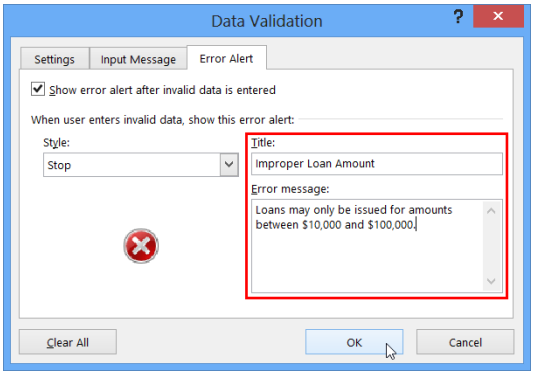
Error Alert Tab

The Error Alert tab contains controls to customize the alert dialog box that will be displayed

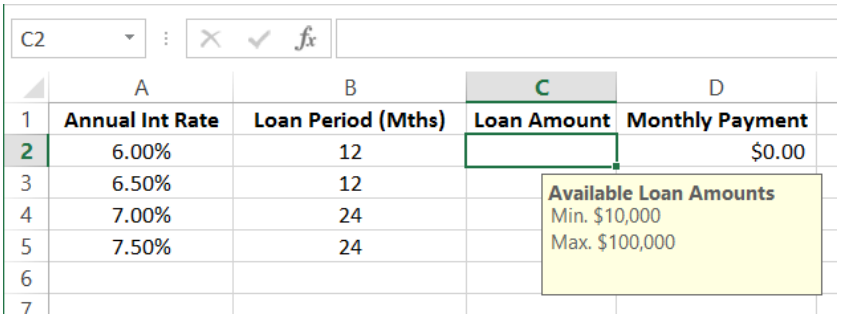


if a user enters a value that is outside the validation rules you specified.

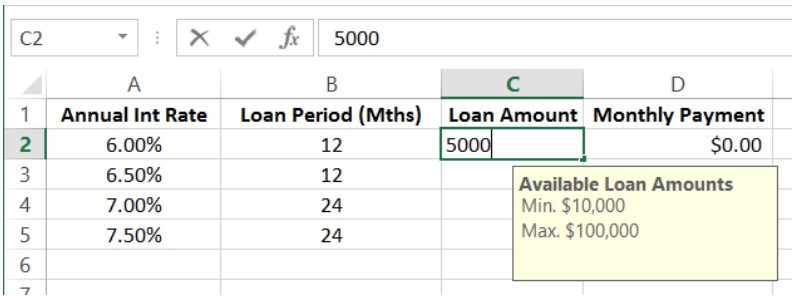
For this example, enter the title and error message shown in the image below. Click OK:



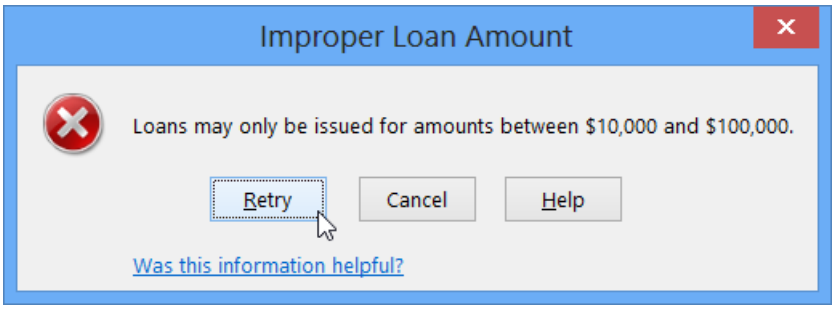
The data validation rules have now been applied to cells C2:C5. Click any of these cells to see the input message you created:



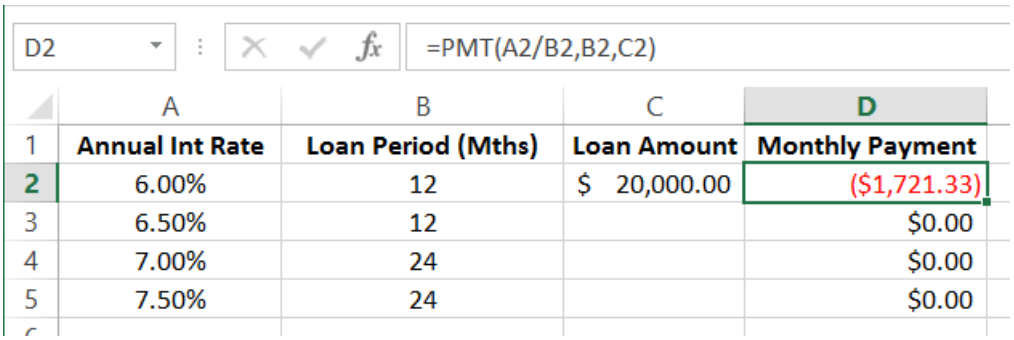
Type 5000 into C2 and press Tab:



The dialog that you just created will now be displayed. Click Retry:



The previous cell will then be selected. This time, type "20000" and press Tab. The adjacent cell will be selected, and no error message will be displayed because the data you entered falls within the validation rules you set:



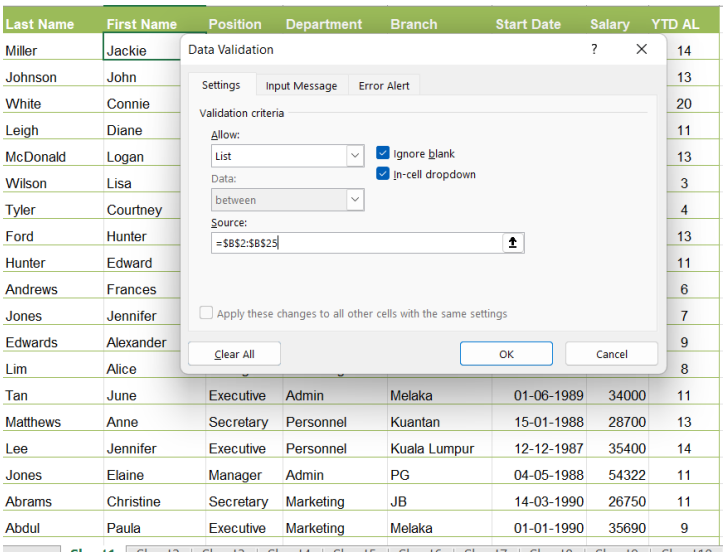
Save the changes that you have made to the current workbook and the file.

Validation Drop-down List

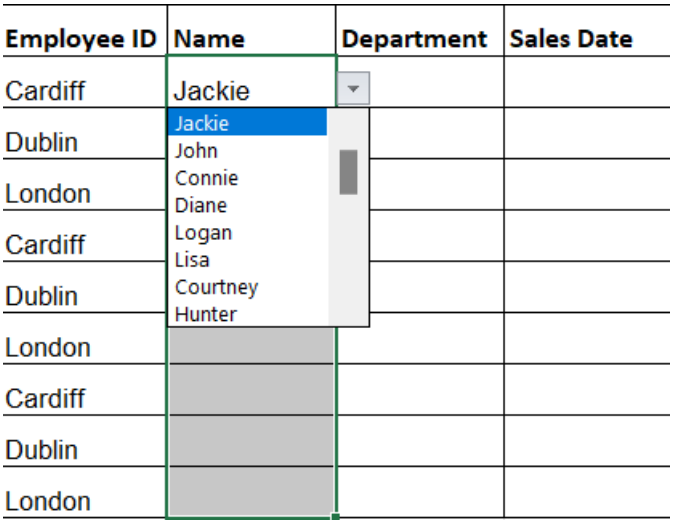
To use data validation, follow these steps;

1. Select the range of cell that you want Excel to validate upon data entry.
2. Select Data Tab > Data Validation (you will see the dialog box as shown below)
3. In the allow list box, choose List

4. In the source text box, enter the range of cells containing your list of values (ie. the rules)
5. Click OK



Now when you enter data, there will be a drop down box where you can choose your values. If you do not want to use the drop down box, text can be entered directly instead. However if the text type in directly is not within the said list, Excel will reject the entry immediately.

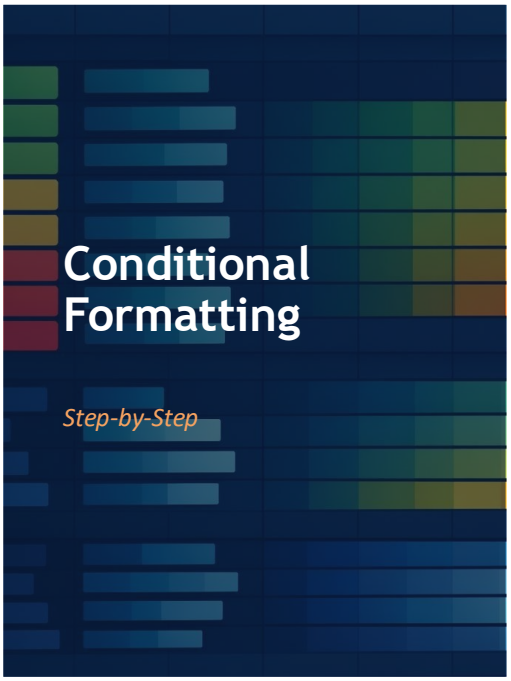


Module 5

Conditional Formatting

What Is Conditional Formatting in Excel?

Conditional formatting is a technique that allows you to modify cell formatting based on specific conditions



1. **Select Your Data**
   Highlight the cells or range you want to format conditionally
2. **Open Conditional Formatting**
   Go to Home tab > Styles group and click Conditional Formatting
3. **Choose a Rule Type**
   Pick from Highlight Cells, Top/Bottom Rules, Data Bars, Color Scales, or Icon Sets
4. **Set Your Condition**
   Define the criteria, such as greater than, less than, between, or contains specific text
5. **Pick a Format**
   Choose a fill color, font color, or border style for cells that match the rule
6. **Confirm and Apply**
   Review the preview, then click OK to apply. Manage rules later via Manage Rules

Types of Conditional formatting

Highlight Cells Rules

Change cell colors based on specific values, text, dates, or duplicates. Great for flagging outliers.

Data Bars

Add gradient bars inside cells to visualize relative values at a glance without a separate chart.

Color Scales

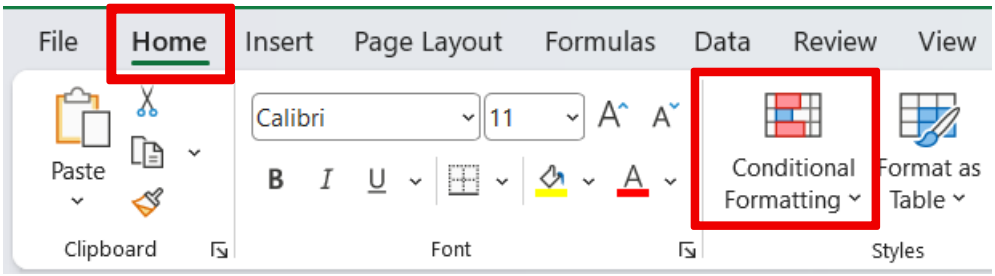
Apply two- or three-color gradients across a range to show how values are distributed.

Icon Sets

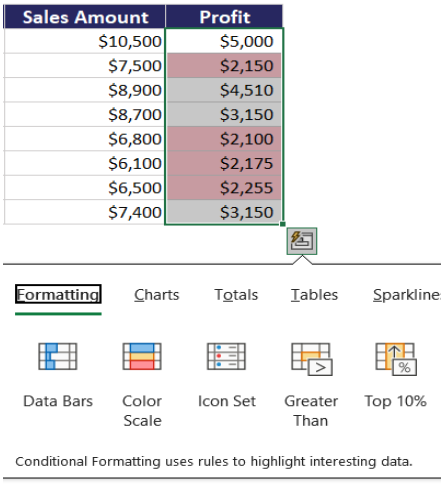
Display arrows, traffic lights, flags, or star ratings based on cell values to indicate status or rank.

Where Is Conditional Formatting Located in Excel?

You can access conditional formatting through the **Styles** section on the **Home** tab of the **Ribbon**.



Additionally, a quicker way to apply conditional formatting is via the **Quick Analysis Tool**, which appears at the bottom-right corner of any selected range in the worksheet.



Note

Keep in mind that the **Quick Analysis Tool** provides fewer formatting options compared to the Ribbon.

Let's explore various types of conditional formatting available in Excel on the Windows operating system. I'll use a sample dataset for illustration, where column **B** contains month values, column **C** has employee IDs, column **D** lists salesperson names, column **E** shows sales amounts, and column **F** displays earned profit for a specific month. Based on different criteria, we'll apply formatting rules to this dataset.

	A	B	C	D	E	F
2						
3		Sales Data				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Mar-2022	ID-22001	Harry Pittman	$10,500	$5,000
7		May-2022	ID-22002	Jason Carson	$7,500	$2,150
8		Aug-2022	ID-22003	Potter Webster	$8,900	$4,510
9		Oct-2022	ID-22004	Shawn Paul	$8,700	$3,150
10		Dec-2022	ID-22005	Gill Gomez	$6,800	$2,100
11		Feb-2023	ID-22006	Merry Schultz	$6,100	$2,175
12		Apr-2023	ID-22007	Saphen Alvarado	$6,500	$2,255
13		Jul-2023	ID-22008	Wilson Harper	$7,400	$3,150
14						

Highlight Cells Rules

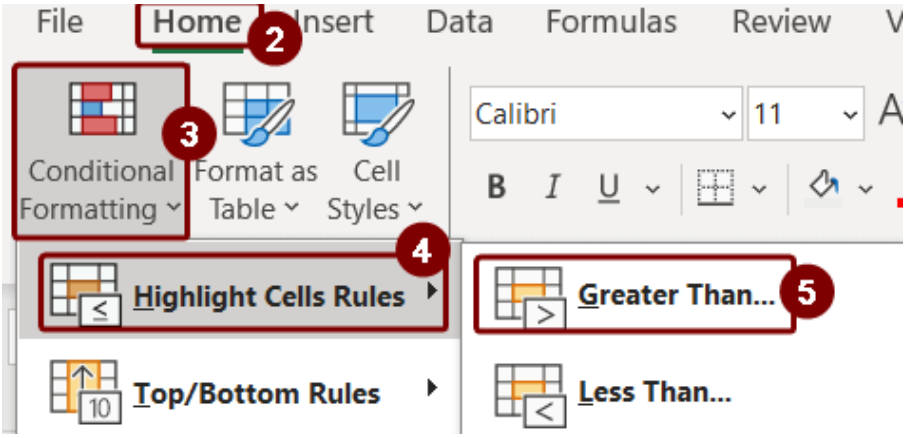
You can highlight cells based on specific rules, such as greater than, lesser than, or within a certain range. Let's start with an example:

Criteria 1: Cell Value Is Greater Than Particular Value

Step 1 Select the cell range **F6:F13**.

Go to the **Home** tab, click on **Conditional Formatting**, and choose **Highlight Cells Rules**.

From the dropdown menu, select **Greater Than**.



Set the comparison value to **4000**.

Choose a **light red fill** with **dark red text format**.

Click **OK** to apply the formatting.



The result will look like the image below.

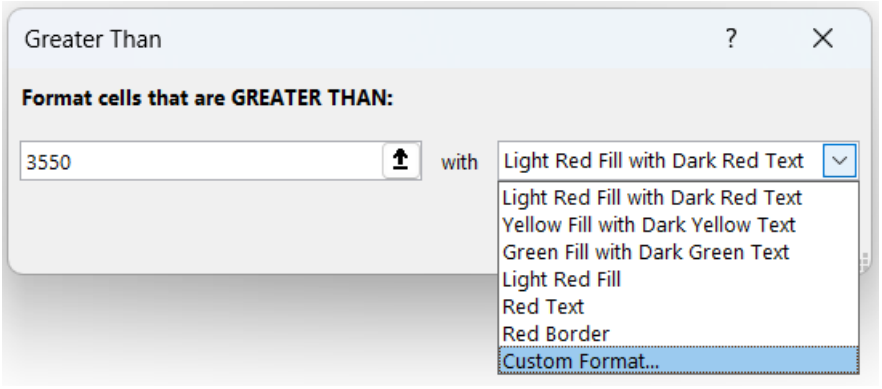
Month-Year	Employee ID	Salesperson	Sales Amount	Profit
Mar-2022	ID-22001	Harry Pittman	$10,500	$5,000
May-2022	ID-22002	Jason Carson	$7,500	$2,150
Aug-2022	ID-22003	Potter Webster	$8,900	$4,510
Oct-2022	ID-22004	Shawn Paul	$8,700	$3,150
Dec-2022	ID-22005	Gill Gomez	$6,800	$2,100
Feb-2023	ID-22006	Merry Schultz	$6,100	$2,175
Apr-2023	ID-22007	Saphen Alvarado	$6,500	$2,255
Jul-2023	ID-22008	Wilson Harper	$7,400	$3,150

Using a Preset **Rule with Custom Formatting**

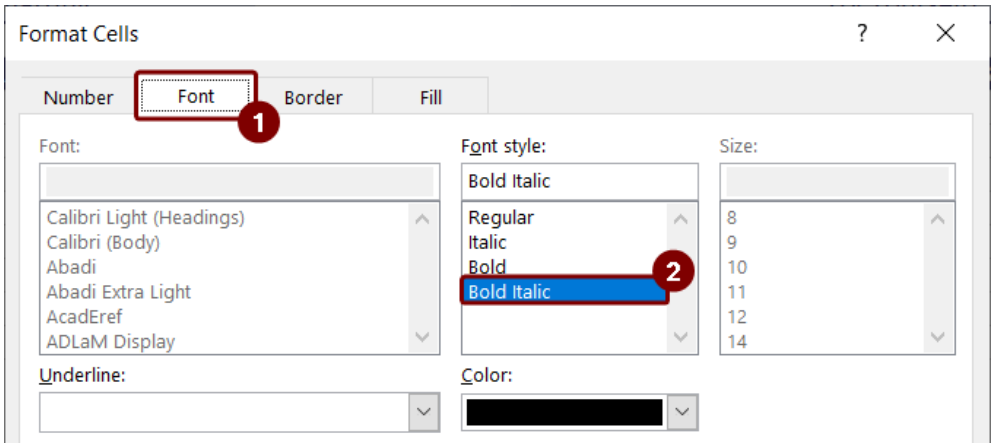
Select the same cell range (**F6:F13**).

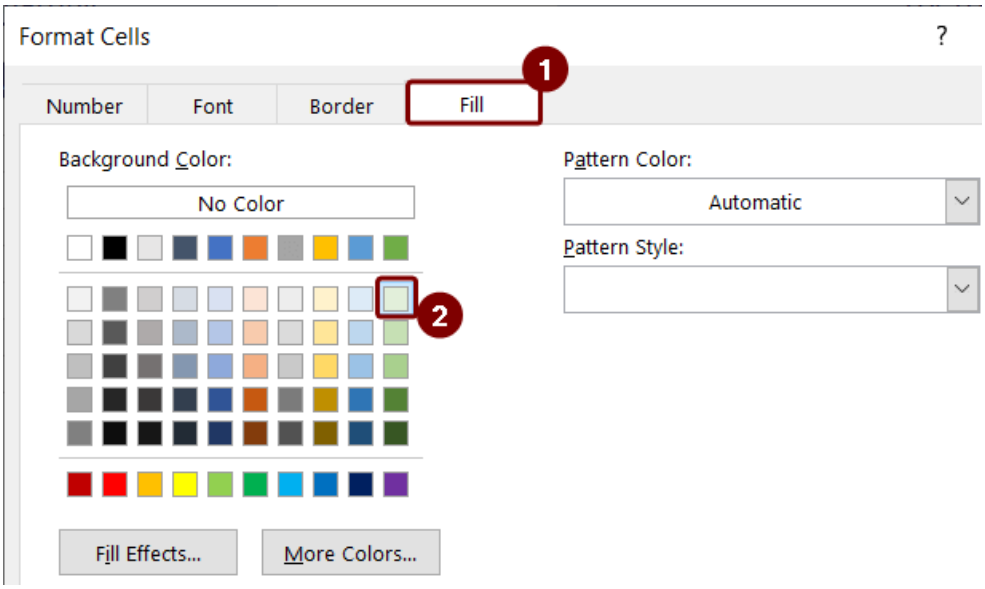
Go to **Home** > **Conditional Formatting** > **Highlight Cell Rules** > **Greater Than**.

In the **Greater Than** dialog box, enter **3550** as the comparison value.



Choose **custom formatting**: **bold italic font** and **light green fill color**.



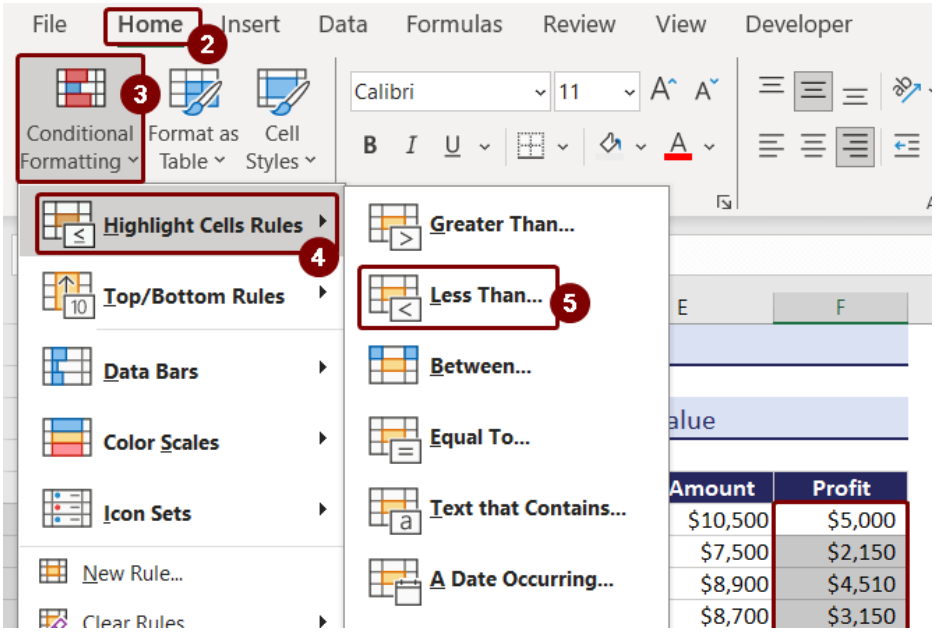


Confirm by pressing **OK**.

Sales Amount	Profit
$10,500	***$5,000***
$7,500	$2,150
$8,900	***$4,510***
$8,700	$3,150
$6,800	$2,100
$6,100	$2,175
$6,500	$2,255
$7,400	$3,150

Criteria **2: Cell Value Is Less Than Particular Value**

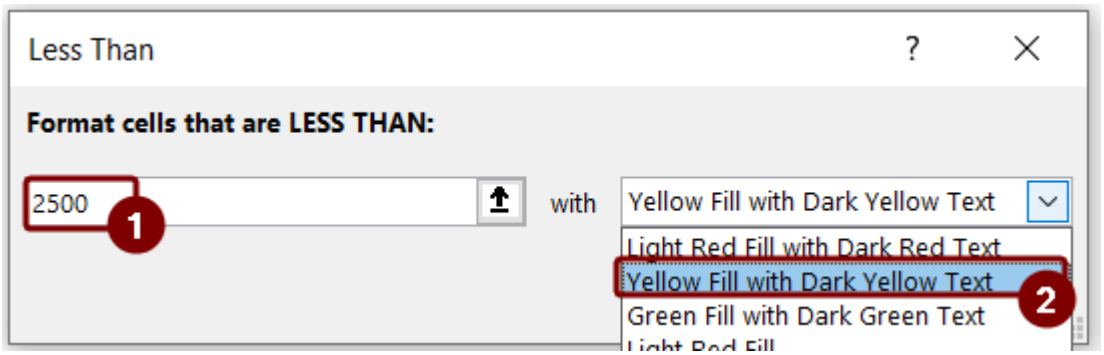
Select the cell range where you want to apply this rule.
Go to **Highlight Cells Rules** and select **Less Than**.



Set the comparison value to 2500.

Apply yellow fill with dark yellow text formatting.

Press OK to close the dialog box.



This is the output after the conditional formatting is applied.

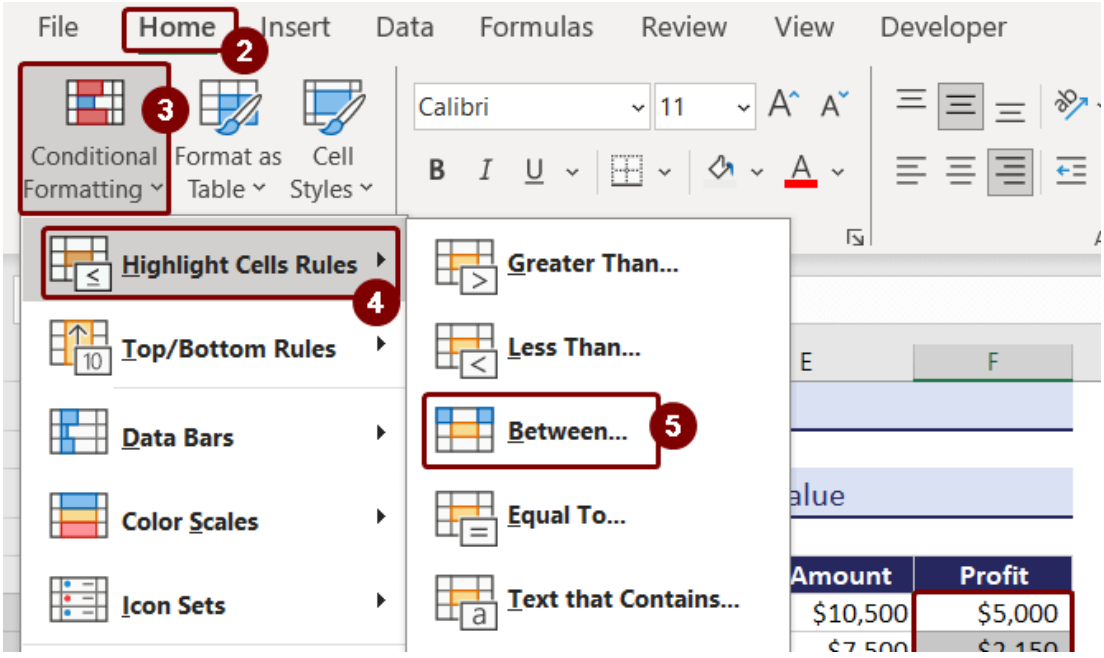
	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Cell Value Is Less Than Particular Value				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Mar/2022	ID-22001	Harry Pittman	$10,500	$5,000
7		May/2022	ID-22002	Jason Carson	$7,500	$2,150
8		Aug/2022	ID-22003	Potter Webster	$8,900	$4,510
9		Oct/2022	ID-22004	Shawn Paul	$8,700	$3,150
10		Dec/2022	ID-22005	Gill Gomez	$6,800	$2,100
11		Feb/2023	ID-22006	Merry Schultz	$6,100	$2,175
12		Apr/2023	ID-22007	Saphen Alvarado	$6,500	$2,255

Cell Values Are Between Two Values

In this case, we want to highlight cells with values falling between two specified thresholds. Follow these steps:

Select the cell range (F6:F13).

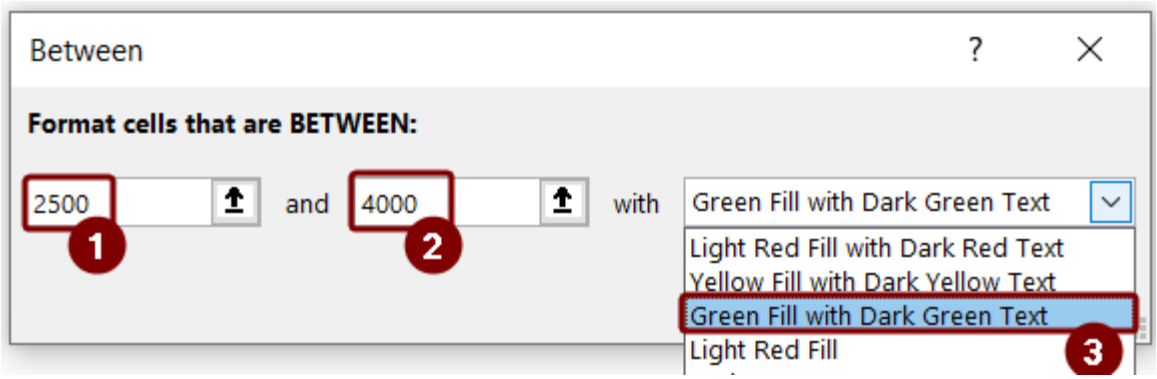
Go to Conditional Formatting and choose Between.



Set the range values (e.g., **3000** and **4500**).

Apply a **green fill** with **dark green text**.

Press **OK** to apply the formatting.



Below the output after the conditional formatting is applied.

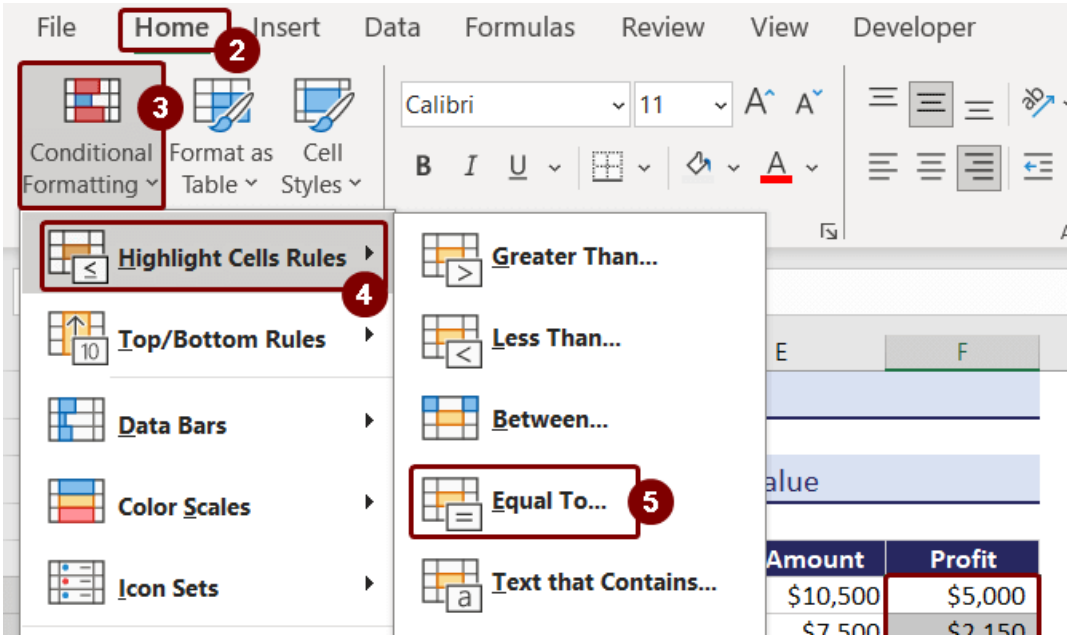
	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Cell Values Are Between Two Values				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Mar/2022	ID-22001	Harry Pittman	$10,500	$5,000
7		May/2022	ID-22002	Jason Carson	$7,500	$2,150
8		Aug/2022	ID-22003	Potter Webster	$8,900	$4,510
9		Oct/2022	ID-22004	Shawn Paul	$8,700	$3,150
10		Dec/2022	ID-22005	Gill Gomez	$6,800	$2,100
11		Feb/2023	ID-22006	Merry Schultz	$6,100	$2,175

Criteria 4: Cell Value Is Equal to Particular Value

To highlight cells equal to a specific value:

Select the cell range (F6:F13).

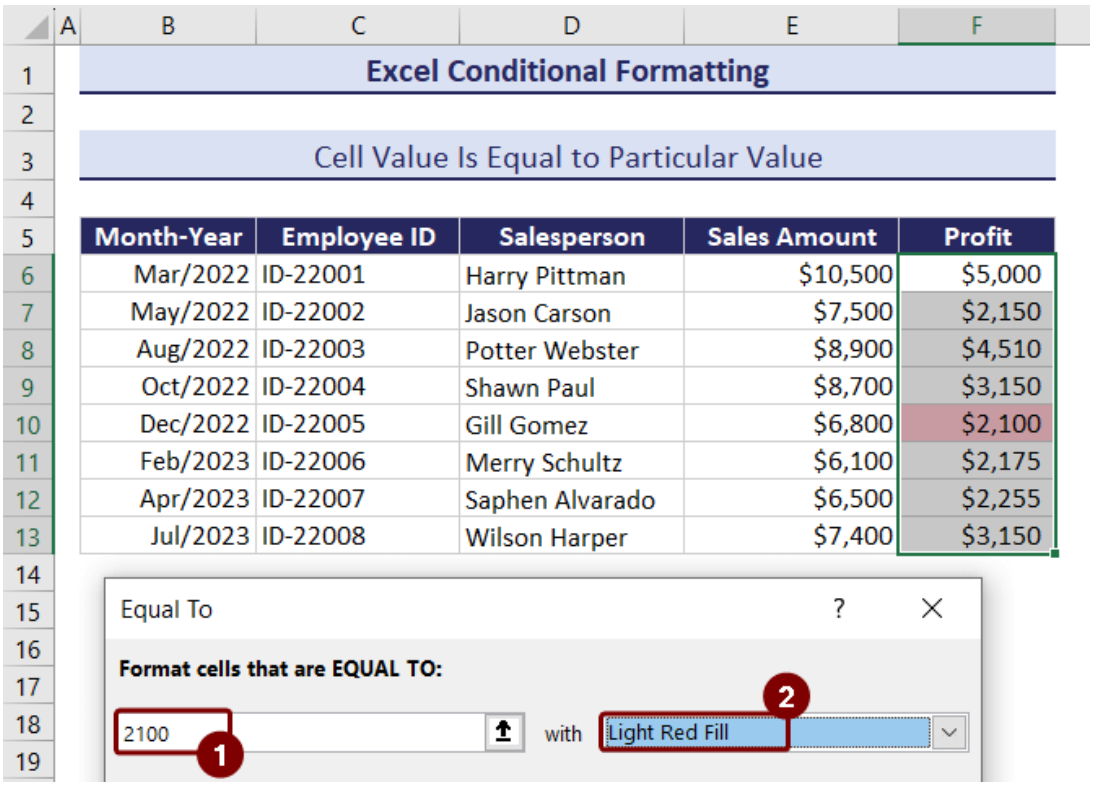
Choose Equal To from the Highlight Cells Rules.



Set the value (e.g., **2100**).

Apply a **light red fill**.

Cell **F10** will be highlighted.



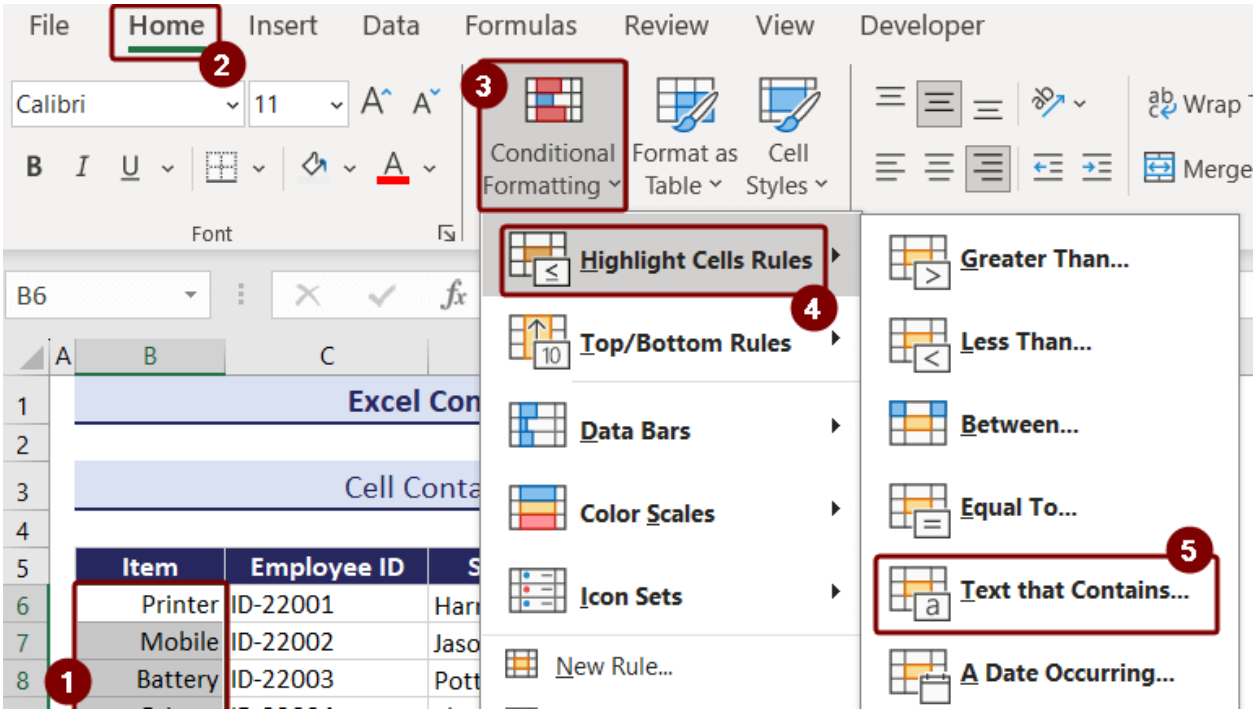
Criteria **5: Cell Containing Particular Text**

This condition focuses on text-based highlighting:

	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Cell Containing Particular Text				
4						
5		**Item**	**Employee ID**	**Salesperson**	**Sales Amount**	**Profit**
6		Printer	ID-22001	Harry Pittman	$10,500	$5,000
7		Mobile	ID-22002	Jason Carson	$7,500	$2,150
8		Battery	ID-22003	Potter Webster	$8,900	$4,510
9		Printer	ID-22004	Shawn Paul	$8,700	$3,150
10		Monitor	ID-22005	Gill Gomez	$6,800	$2,100
11		Laptop	ID-22006	Merry Schultz	$6,100	$2,175

Select the cell range (**B6:B13**).

Use **Text that Contains** from the **Highlight Cells Rules**.



In the dialog box, type **Printer**.

Apply a **light red fill** with **dark red text**.

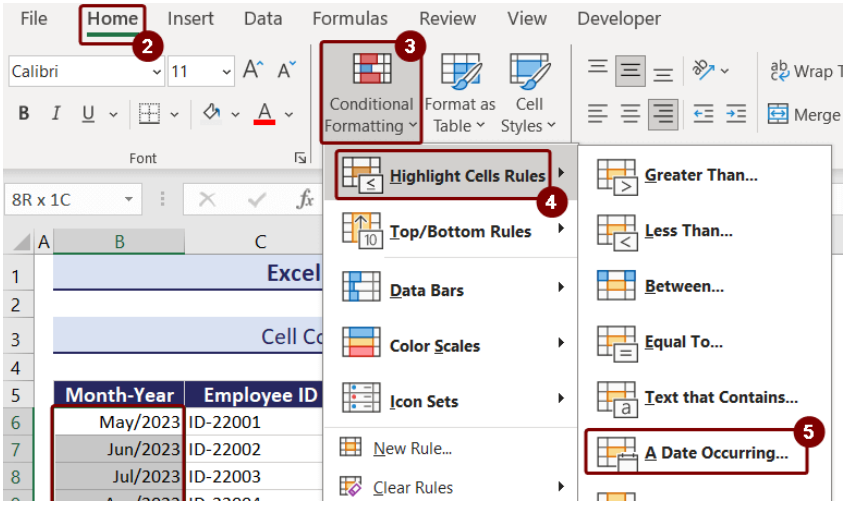
Press **OK** to close the box.

Criteria 6: Cell Containing Particular Dates

For date-based formatting:

Select the cell range containing dates (**B6:B13**).

Choose **A Date Occurring** from the dropdown.



Set the rule (e.g., **Last month**).

Apply a **light red fill** with **dark red text**.

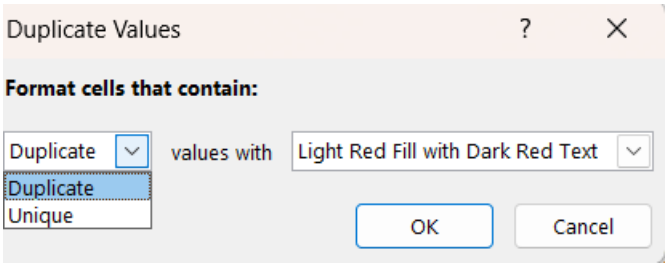
As a result, in cell range **B6:B13**, only the previous month's dates will be highlighted.

Criteria 7: Duplicate Cell Values

To find and highlight duplicates:

Select the relevant cell range.

Pick **Duplicate Values** from the dropdown.



Opt for the **Duplicate** option.

You can also highlight unique values by choosing **Unique**.

The conditional formatting is applied to duplicate values.

Top/ Bottom Rules

The Top **and Bottom Rules** represent the second type of Conditional Formatting in Excel. These rules allow you to highlight either the highest or lowest values from a large dataset or determine the top or bottom percentage of data. Let's explore various scenarios using the dataset provided:

Top/Bottom Rules

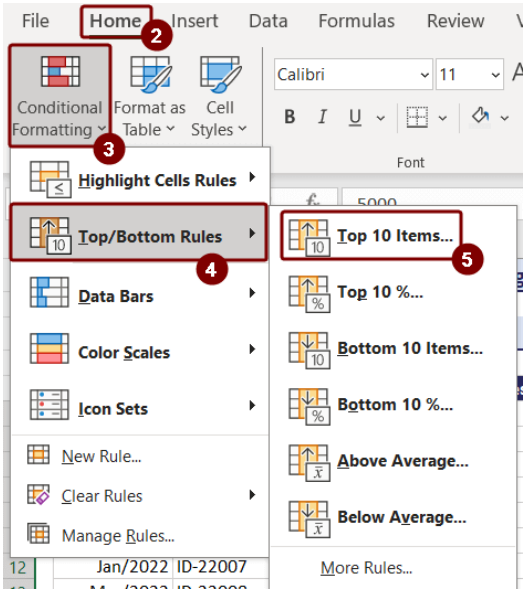
Month-Year	Employee ID	Salesperson	Sales Amount	Profit
Jan-2021	ID-22001	Harry Pittman	$10,500	$5,000
Mar-2021	ID-22002	Jason Carson	$7,500	$2,150
May-2021	ID-22003	Potter Webster	$8,900	$4,510
Jul-2021	ID-22004	Shawn Paul	$8,700	$3,150
Sep-2021	ID-22005	Gill Gomez	$6,800	$2,100
Nov-2021	ID-22006	Merry Schultz	$6,100	$2,175
Jan-2022	ID-22007	Saphen Alvarado	$6,500	$2,255
Mar-2022	ID-22008	Wilson Harper	$7,400	$3,150
May-2022	ID-22009	Ryan Russell	$8,800	$3,760
Jul-2022	ID-22010	Ramiro Harper	$8,900	$3,100
Sep-2022	ID-22011	Maggie Gilbert	$10,500	$4,100
Nov-2022	ID-22012	Jackie Berry	$9,700	$3,000
Jan-2023	ID-22013	Franklin Sanders	$11,400	$4,700
Mar-2023	ID-22014	Pablo Beck	$13,100	$4,300

Case 1: Any Number of Top Values from the Data Set

Select the cell range **F6:F25**.

Go to the **Home** tab and choose the **Top/Bottom Rules** option.

From the rules, select **Top 10 Items**.



A dialog box will appear where you can manually input the number of top values. Generally, it defaults to 10 if you have more than 10 values.

Choose your desired formatting and press **OK**.



This is the output after the conditional formatting is applied.

	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Any Number of Top Values				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Jan/2021	ID-22001	Harry Pittman	$10,500	$5,000
7		Mar/2021	ID-22002	Jason Carson	$7,500	$2,150
8		May/2021	ID-22003	Potter Webster	$8,900	$4,510
9		Jul/2021	ID-22004	Shawn Paul	$8,700	$3,150
10		Sep/2021	ID-22005	Gill Gomez	$6,800	$2,100
11		Nov/2021	ID-22006	Merry Schultz	$6,100	$2,175

Case 2: Top 10% (or Any Other Percentage) of Values from the Data Set

Select the cell range **F6:F25**.

Choose the **Top 10%** from the **Top/Bottom Rules** dropdown.

Set the highlight condition as 10% and format the cells with **Yellow Fill** and **Dark Yellow Text**.

Top 10% value will be highlighted.

Case **3: Bottom 10 (or Any Number of) Items from the Data Set**

Select the data range **F6:F25**.

Choose the **Bottom 10 Items** from the dropdown.

Apply the desired formatting (format only) and press **OK**.

The bottom 10 items are highlighted.

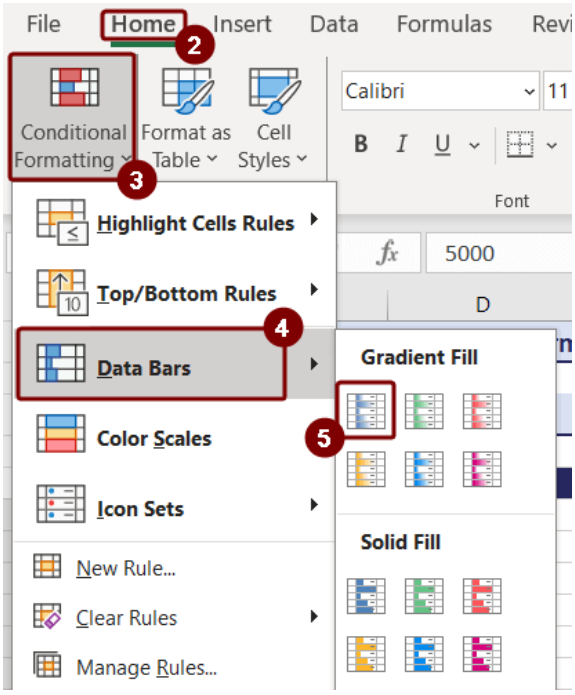
Data Bars

Data Bars represent the third type of conditional formatting in Excel. They visually display the distribution of values within a dataset. Let's explore how to use data bars to show profit distribution:

Select the cell range **F6:F13**.

Go to the **Home** tab, click on **Conditional Formatting**, and choose **Data Bars**.

Pick the **Blue Data Bar** or any other color scheme you prefer.



The data bars will be added to the selected cells, visually representing the data distribution.

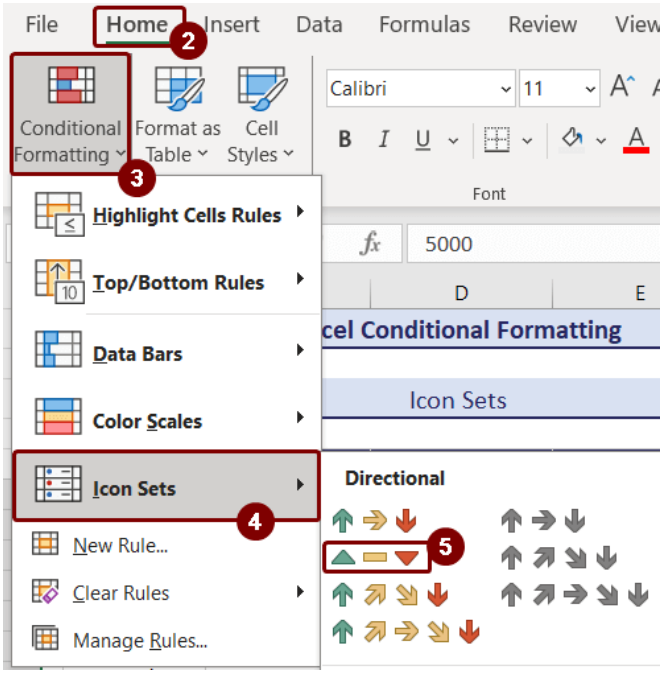
	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Data Bars				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Mar/2022	ID-22001	Harry Pittman	$10,500	$5,000
7		May/2022	ID-22002	Jason Carson	$7,500	$2,150
8		Aug/2022	ID-22003	Potter Webster	$8,900	$4,510
9		Oct/2022	ID-22004	Shawn Paul	$8,700	$3,150
10		Dec/2022	ID-22005	Gill Gomez	$6,800	$2,100
11		Feb/2023	ID-22006	Merry Schultz	$6,100	$2,175

Icon Sets

Icon Sets are the next type of conditional formatting. They work similarly to the previous examples, using icons based on cell values. Follow these steps:

Choose the **Icon Sets** command from the "Conditional Formatting" dropdown, focusing on the cell range **F6:F13**.

Select the **3 Triangle** option from the directional **icon sets**.



In this set, red icons represent lower values, yellow icons represent middle values, and green icons represent higher values in the dataset.

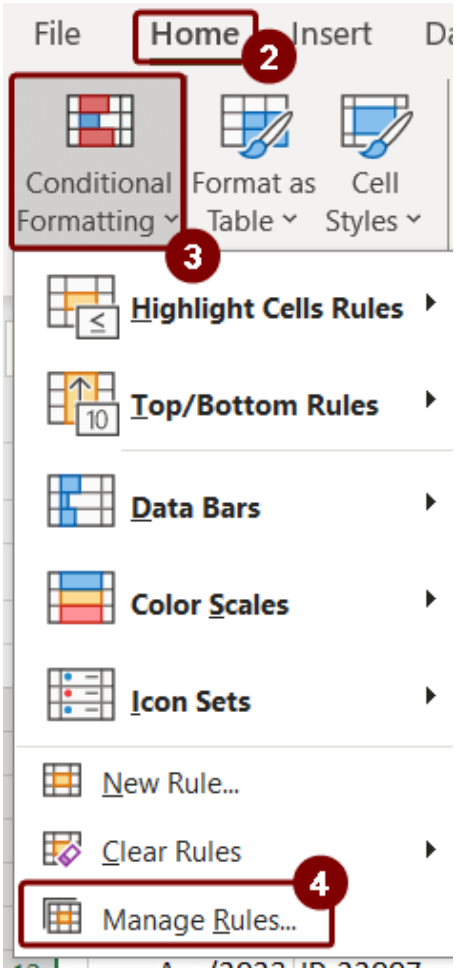
	A	B	C	D	E	F
1		Excel Conditional Formatting				
2						
3		Icon Sets				
4						
5		Month-Year	Employee ID	Salesperson	Sales Amount	Profit
6		Mar/2022	ID-22001	Harry Pittman	$10,500	$5,000
7		May/2022	ID-22002	Jason Carson	$7,500	$2,150
8		Aug/2022	ID-22003	Potter Webster	$8,900	$4,510
9		Oct/2022	ID-22004	Shawn Paul	$8,700	$3,150
10		Dec/2022	ID-22005	Gill Gomez	$6,800	$2,100
11		Feb/2023	ID-22006	Merry Schultz	$6,100	$2,175

Editing Excel Conditional Formatting Rules

Let's change the conditional formatting applied to cells **F6:F13**. Currently, they are formatted with the rule **Cell Value > 3000** and an orange font color. We'll change the text font color to green by editing the rule:

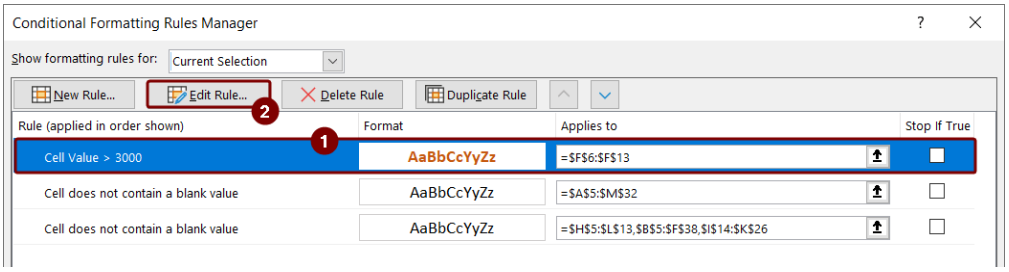
Select cells **F6:F13**.

Click on **Home**, select **Conditional Formatting** and click on **Manage Rules**.



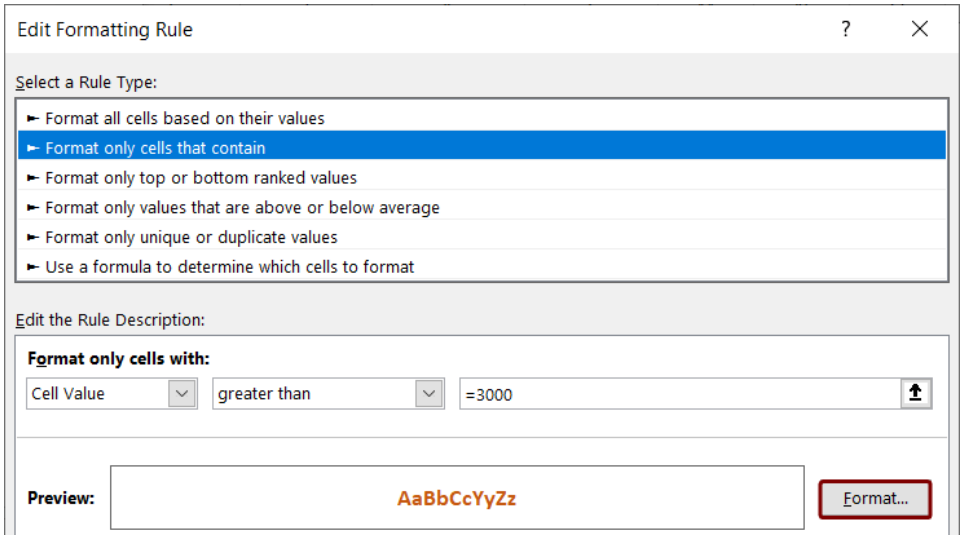
The **Conditional Formatting Rules Manager** box will open.

Select the rule and click **Edit Rule**.



In **Edit Formatting Rule** box, you will see the rule description.

To change the formatting, press **Format**.



In the **Format Cells** box, select the **Font**, click the **Color** drop-down, choose **green**, and press **OK**.

Note

You can also adjust other formatting options (number type, font style, border, fill color) for the selected cells.

Preview the font color change in the **Edit Formatting Rule** box and press **OK**.

Confirm by pressing **OK** again in the **Conditional Formatting Rules Manager**.

The font color will now be green.

Module 6

Managing Multiple Worksheets

Why Use Multiple Worksheet

Logical Separation

Keep related data together — raw data, summaries, and charts each in their own space

Easier Navigation

Quickly switch between datasets without scrolling through one massive sheet

Cross-Sheet Formulas

Link data between sheets for dynamic reports that update automatically

Color-Coded Tabs

Visually distinguish sections at a glance with tab colors and clear naming

Essential Techniques

01

Create & Rename

Right-click tab → Insert or Rename
Use descriptive names like "Q1-Sales" or "Raw-Data"

02

Copy & Move

Drag tabs to reorder
Ctrl+drag to duplicate
Right-click → Move or Copy

03

Group & Edit

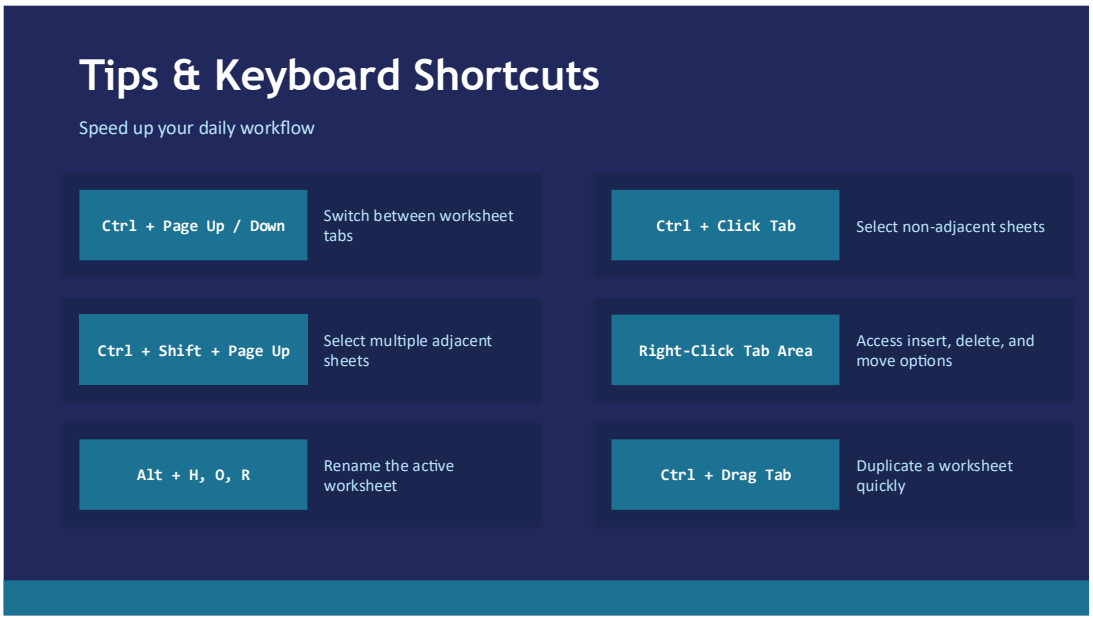
Ctrl+click to select multiple tabs
Edits apply to all grouped sheets
Great for consistent formatting

04

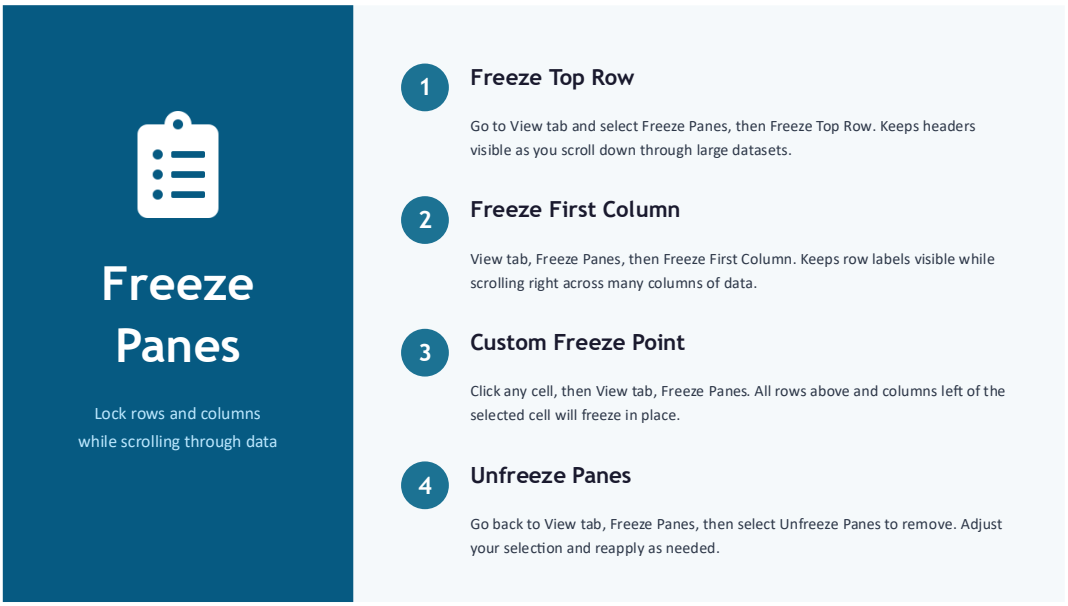
Navigate Fast

Ctrl+Page Up / Down
Right-click navigation arrows
Use hyperlinks between sheets

Worksheet shortcuts



Freeze Panes



Viewing Multiple Worksheets

New Window

Open the same workbook in a second window to view two different sheets side by side

Arrange All

Use the View tab and select Arrange All to tile, cascade, or stack open workbook windows

Split Panes

Divide a single worksheet into scrollable sections for comparing different areas of the same sheet

View Side by Side

Synchronize scrolling across two windows to compare worksheet data in parallel

Grouping Worksheets

01

Select Adjacent

Click first tab, then Shift+click last tab to group consecutive sheets

02

Select Non-Adjacent

Ctrl+click individual tabs to group non-consecutive sheets as needed

03

Edit in Bulk

Type, format, or enter formulas once — changes apply to all grouped sheets

04

Ungroup Sheets

Right-click any grouped tab and select Ungroup, or click an ungrouped tab

Module 7

Printing

Setting up your Worksheets

Page Layout brings together many of the greatest hits of the Page Setup and Print Preview windows from previous Excel versions. This tab provides easy access to a lot of settings that used to be several clicks deep. When you learn to use them all, you'll come a lot closer to finding exactly what you expect when you walk to the printer.

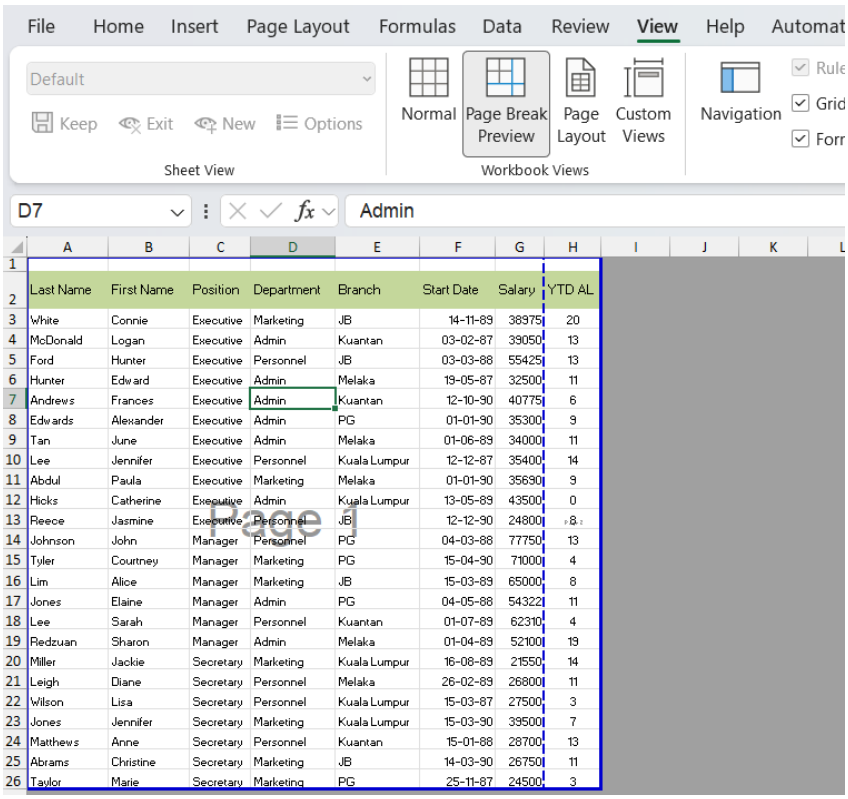
Page Breaks

Page Break refers to the point where Excel prints all subsequent data on a new page. You can change where Excel assigns the Page Break either by using the Page Break Preview window or by inserting Page Breaks.

To reassign where Excel inserts the page break using Page Break Preview:

1. Click on **Page Break Preview button** on the **View tab.**

2. Your screen will look as shown below:



	A	B	C	D	E	F	G	H
2	Last Name	First Name	Position	Department	Branch	Start Date	Salary	YTD AL
3	White	Connie	Executive	Marketing	JB	14-11-89	38975	20
4	McDonald	Logan	Executive	Admin	Kuantan	03-02-87	39050	13
5	Ford	Hunter	Executive	Personnel	JB	03-03-88	55425	13
6	Hunter	Edward	Executive	Admin	Melaka	19-05-87	32500	11
7	Andrews	Frances	Executive	Admin	Kuantan	12-10-90	40775	6
8	Edwards	Alexander	Executive	Admin	PG	01-01-90	35300	9
9	Tan	June	Executive	Admin	Melaka	01-06-89	34000	11
10	Lee	Jennifer	Executive	Personnel	Kuala Lumpur	12-12-87	35400	14
11	Abdul	Paula	Executive	Marketing	Melaka	01-01-90	35690	9
12	Hicks	Catherine	Executive	Admin	Kuala Lumpur	13-05-89	43500	0
13	Reece	Jasmine	Executive	Personnel	JB	12-12-90	24800	8
14	Johnson	John	Manager	Personnel	PG	04-03-88	77750	13
15	Tyler	Courtney	Manager	Marketing	PG	15-04-90	71000	4
16	Lim	Alice	Manager	Marketing	JB	15-03-89	65000	8
17	Jones	Elaine	Manager	Admin	PG	04-05-88	54322	11
18	Lee	Sarah	Manager	Personnel	Kuantan	01-07-89	62310	4
19	Redzuan	Sharon	Manager	Admin	Melaka	01-04-89	52100	19
20	Miller	Jackie	Secretary	Marketing	Kuala Lumpur	16-08-89	21550	14
21	Leigh	Diane	Secretary	Personnel	Melaka	26-02-89	26800	11
22	Wilson	Lisa	Secretary	Personnel	Kuala Lumpur	15-03-87	27500	3
23	Jones	Jennifer	Secretary	Marketing	Kuala Lumpur	15-03-90	39500	7
24	Matthews	Anne	Secretary	Personnel	Kuantan	15-01-88	28700	13
25	Abrams	Christine	Secretary	Marketing	JB	14-03-90	26750	11
26	Taylor	Marie	Secretary	Marketing	PG	25-11-87	24500	3

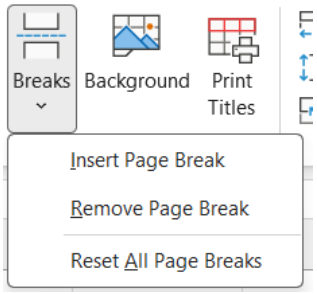
3. The blue dashed lines represent the page breaks

4. To adjust the Page Break, Place your mouse pointer on the blue line, hold the mouse button down and drag to readjust.

To manually insert a Page Break:

1. Select the Column or Row heading.

2. Select the **Page Layout tab**. Click on the Breaks button and select Insert Page Break



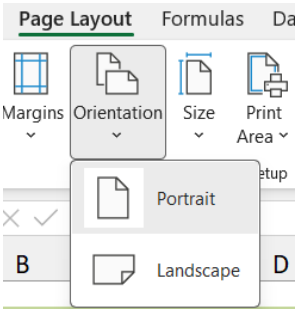
Setting Page Orientation

Page Orientation offers a familiar function, turning the printed page on its side (landscape) or vertically (portrait)

To set your page orientation in either landscape mode or portrait mode:

1. Select the Page Layout tab.

2. Click the Orientation button and select your orientation preference.



Setting Margins

Margins in Excel provide built-in settings for Normal, Wide, and Narrow. When you click one of the choices (and you've zoomed out to a view of 50% or so), you can see dotted lines indicating where the margins will be. Click Custom Margins to enter your own preferred dimensions

To set your margins:

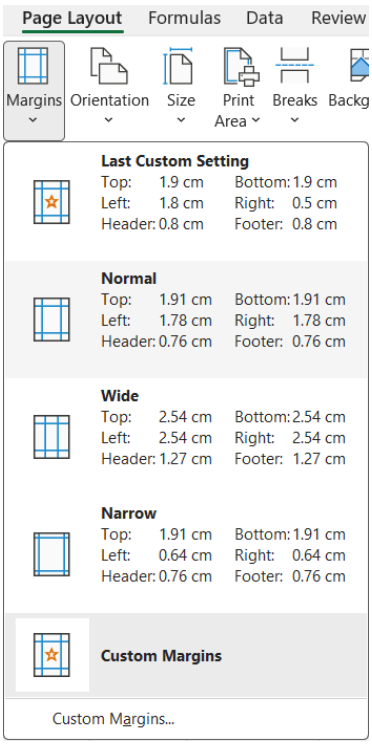
1. Select the **Page Layout tab.** Click on the **Margins button.**

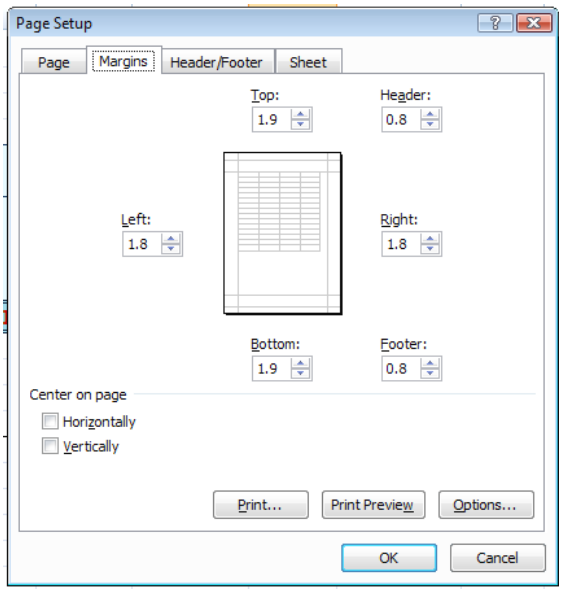
2. This will display the following Margins options:

3. You may select any one of the built-in margin options.

4. If you want finer control over the margins, select **Custom Margins** from the options.

5. The following dialog box will be displayed for you to set the appropriate margins:





Margins can also be adjusted In the Print Preview.

1. Select the File tab and click Print and the Print Preview will automatically be shown on the right side of the window.

2. If the margins are not displayed, click show margin command at the bottom right hand corner to display margins.

3. Place your mouse pointer over the margin lines and drag the margins to resize.

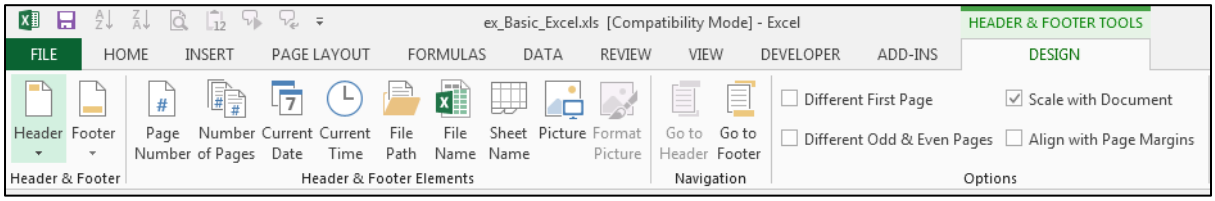
Setting Headers and Footers

If you want particular information (i.e. page numbers, titles, date) to appear at the top and bottom of every single page, you can do so by inserting Headers and Footers. A Header appears at the top of every single printed page. A Footer appears at the bottom of every single printed page.

To insert a Header/Footer

1. Click on the **Header & Footer button in the Text panel** of the Insert tab.

2. Excel displays the Design contextual tab.



3. A header area appears at the top of the sheet. If you are already in Page Layout view, the header area is visible at the top of the sheet

4. One section of the header appears on the left of the top margin, one in the center, and one on the right. Although all three sections may not be visible, clicking in one of these areas will trigger that section to appear

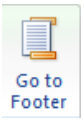
5. Click the section of the header where you want to add content.

6. Type in the text you want to repeat at the top of each printed page or click one of the options from the Header & Footer Elements group on the Design tab (current time, file name, etc.).

    a. To change the formatting of the text, select the text that you want to format.

    b. Select the Home tab and use the formatting commands in the Font group.

7. You can also insert predefined Headers and Footers by clicking the Header or Footer button on the Design tab.

8. To switch to the Footer, click on the Go to Footer button. 

9. To stop working with your header, click outside of it and change your view back to the Normal view.

Setting a Print Area

Print Area is the place to highlight the portion of the worksheet you want to print out, which proves very handy when you want to distribute only certain parts of a large worksheet, such as one quarter's results. Just drag the cursor over a block of cells and then choose Set Print Area. You can add another, nonadjacent block by highlighting it and choosing Add To Print Area.

1. Select the cells you of the area you want printed.

2. In the Page Layout tab, click on the Print Area button 

. Select Set Print Area.

3. When you print your worksheet, only the print area that you set will be printed.

4. To clear the print area, select Clear Print Area when you click the Print Area button.

Print Titles

Print Titles makes it easier to keep track of information spread across several printed pages. Let's say you've typed column headings such as "Postage," "Entertaining," and "Travel" at the top of the worksheet. If the data columns under each heading are long enough to reach past the first printed page, it may be hard to remember whether the third column on the left is Entertaining or Travel. By using Print Titles to select the row containing the column labels, you can ensure they are repeated at the top of each printed page.

The Scale To Fit

The Scale To Fit tools provide an easy way to make everything fit on a page. Using the pull-down menus under Width and Height, choose the number of pages you want the printed worksheet to fit on. Excel automatically reduces the content's size to fit within the allotted space.

Sheet Options

Sheet Options simply determines whether gridlines and headings (the letters of columns and numbers of rows) appear on printed sheets.

Previewing your Worksheet

To ensure that your worksheet is printed out exactly as you want it, you can use the Print Preview option.

1. Select the File tab and click on print. The preview would be on the right side of the window.
2. From the Print Preview mode, you can still make amendments to the layout of your worksheet.
3. You can display your Page setup dialog box by clicking on the Page Setup button.
4. To adjust margins, click the Show Margins button to display the margins. Drag the margins to adjust.
5. You can zoom in on your worksheet by using the Zoom button.

Printing your Worksheet

Once you are satisfied with the preview of your worksheet, you are now ready to print your worksheet.

1. Click on the File tab.
2. Choose your options (Printer choice, pages to print, number of copies etc)
3. Click on Print.



1 **Open Print Dialog**

Press Ctrl+P or go to File and select Print to open the Print dialog

2 **Choose Your Printer**

Select the printer you want from the dropdown list at the top of the dialog

3 **Set the Print Range**

Choose to print all pages, the active sheet only, or enter specific page numbers

4 **Adjust Number of Copies**

Set how many copies you need and check the Collate option for ordered printing

5 **Preview Your Pages**

Use Print Preview on the right side to verify your pages look correct before printing

6 **Click Print**

When everything looks right, click the Print button to send your document to the printer

Module 8

Basic Skills for Charting

What is a Chart?

Charts are powerful visual tools in Excel that transform complex datasets into clear, concise visual representations. Visually appealing and insightful charts in Excel can transform your data from overwhelming spreadsheets into actionable insights. Displaying data in a well-conceived chart can make your numbers more understandable. Because a chart presents a picture, charts are particularly useful for summarizing a series of numbers and their interrelationships. Making a chart can often help you spot trends and patterns that may otherwise go unnoticed.

Charts let you get your thoughts across with simplicity and strength and, because different charts may cause you to draw varied conclusions, they also prod you to ask questions about what you are seeing. Whatever the idea you are trying to convey, charts make it easier.

Understanding How Excel Handles Charts

Before you can create a chart, you must have some numbers-sometimes known as data. The data, of course, is stored in the cells in a worksheet. Normally, the data that a chart uses resides in a single worksheet, but that's not a strict requirement. A chart can use data that's stored in any number of worksheets, and the worksheets can even be in different workbooks.

Choosing the Right Chart Type

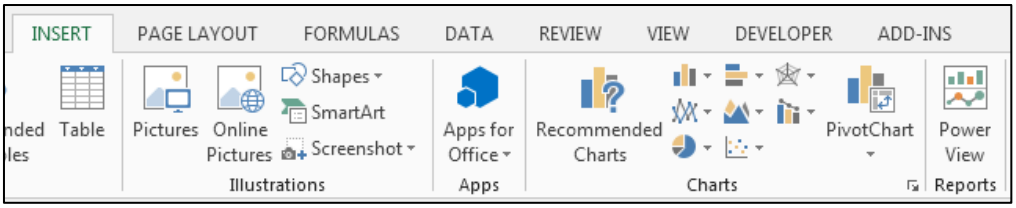
Understanding chart types is essential for accurately visualizing data. Here are common Excel chart types and ideal use-cases:

Chart Type	Best For	Example Use Case
Column Chart	Comparing categories over time	Monthly revenue Jan–Jun
Bar Chart	Ranking or comparing many items	Product sales comparison
Pie Chart	Showing parts of a whole (≤5 categories)	Budget breakdown by category
Line Chart	Showing trends over time	Website traffic month by month

Excel 's Recommended Chart

In Excel's Recommended Chart Option, it shows you a live preview of the chart already with your data in it. That way, you'll know you're making the right decision without having to guess what the output will look like. This feature can be found both in the new Insert Chart dialog, as well as the new Quick Analysis feature.

Select your data to plot your chart. From the Insert tab > click Recommended charts.



Excel will then display all the suggested charts. Click on any chart on the left. The preview can be seen on the right. If you don't see a chart you like, click All Charts to see all available

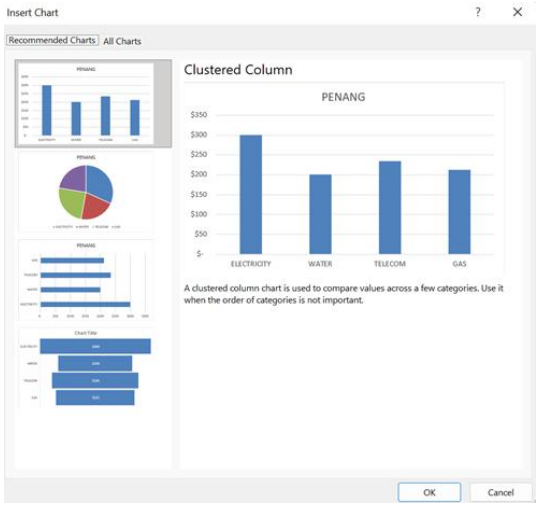
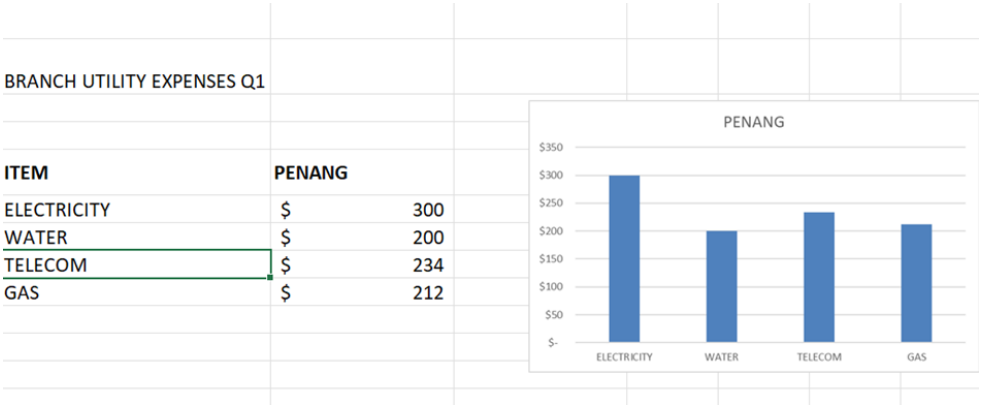


chart types. Click OK when done.

Excel then inserts the chart as shown below.



When the chart is selected, chart tools will display the Design tab and the Format tab.

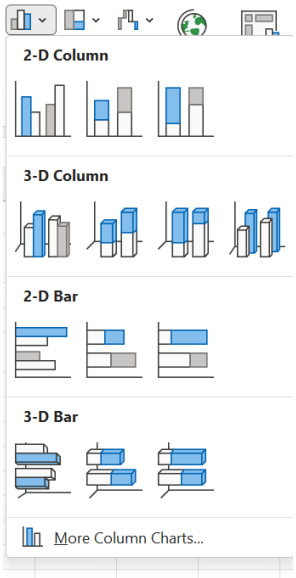


Inserting A Chart

If you know exactly what chart you want to insert, you can choose directly from the Insert tab.

1. Select the data you want to plot in the chart.

2. Go to the Insert tab, select any of the Charts shown or for more choices, click the arrow beneath the chart style you want: Excel can create many different chart types; each

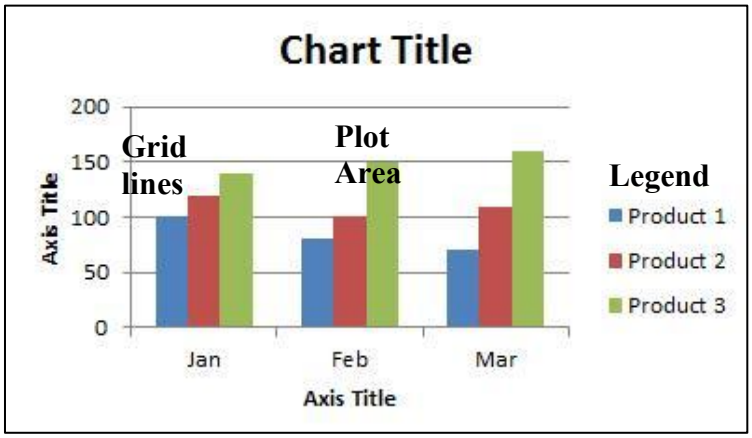


compares data in a different manner.

Once you select your Chart type, Choose a chart subtype. Depending on the chart type, some chart subtypes show the data series next to each other; others show the data elements stacked on top of each other. Some charts are two-dimensional, and others are three-dimensional. Excel creates the chart on the worksheet where your data resides.

You can change the chart location to its own sheet. But just in case you don't like your changes, make sure to save your worksheet, which also saves your chart, before modifying chart attributes.

Elements of a Chart



Adding Chart Elements

Excel makes it so easy to add chart elements to a chart. When a chart is selected, you will see 3 commands on the right of the chart. Use the Chart Elements, Chart Styles, and Chart Filters buttons next to the upper-right corner of the chart to add chart elements like axis titles or data labels, customize the look of your chart, or change the data that's shown in the chart.

To add chart elements, click on the  command and check the elements you want and uncheck those you do not want.

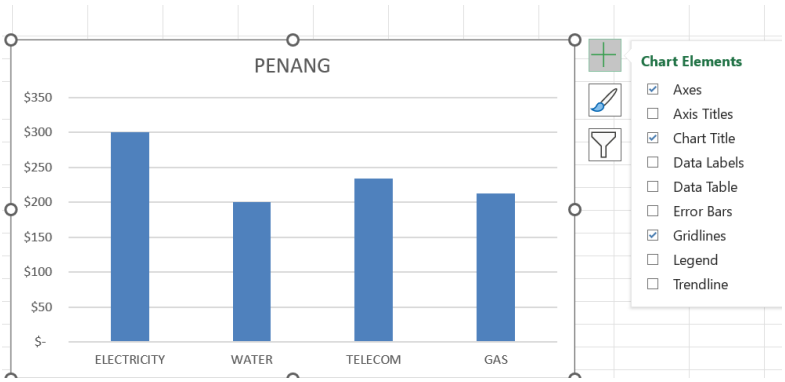


Chart Styles (Formatting a Chart)

Chart styles give you a way to apply formatting to ordinary charts. Excel includes a wide range of chart styles that vary from simple, flat charts with minor accents (like colored borders) to showier styles that include bevel effects and shadows. You can quickly create plain or opulent charts, depending on your needs.

To change your chart style, select the chart and click  command and choose the style that you like. As you place your mouse over a certain style, you will get a live preview.



Before you use a chart style, it's important to understand what it changes (and what it doesn't). Every chart style includes settings that determine:

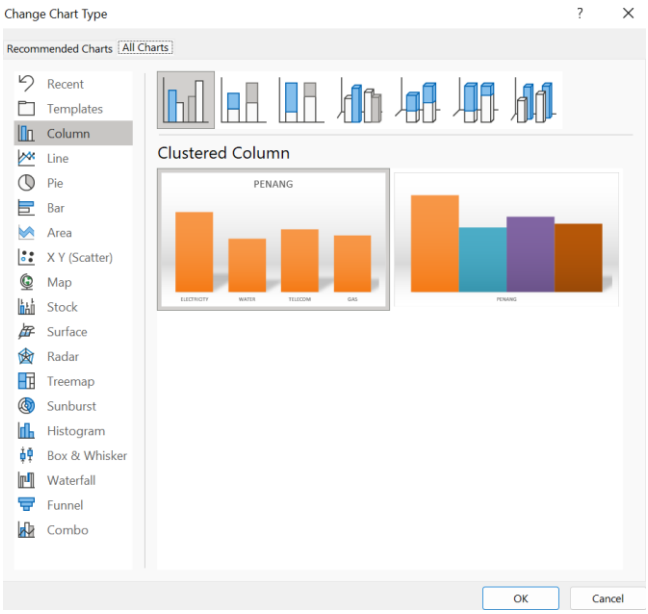
- The background color.
- The colors for each series (which may be displayed as bars, lines, points, or something else). Some colorful chart styles use all the colors from the current theme. Other chart styles take a single color from the current theme and use multiple shades of that color for a more refined look.
- Shape effects, like softly curved or beveled edges, shadows, and glow.
- Marker styles (for line and XY scatter charts) that distinguish the points in one series from those in another.

On the other hand, chart styles don't change the font Excel uses for the chart title and labels; instead Excel bases these elements on the current theme. Chart styles also don't change the layout of the chart or the chart settings Excel uses for the legend, scale, axis titles, error bars, and so on.

Change the Chart Type

1. Select the chart. From the Design tab > click Change chart type.
2. Select the chart type on the left.

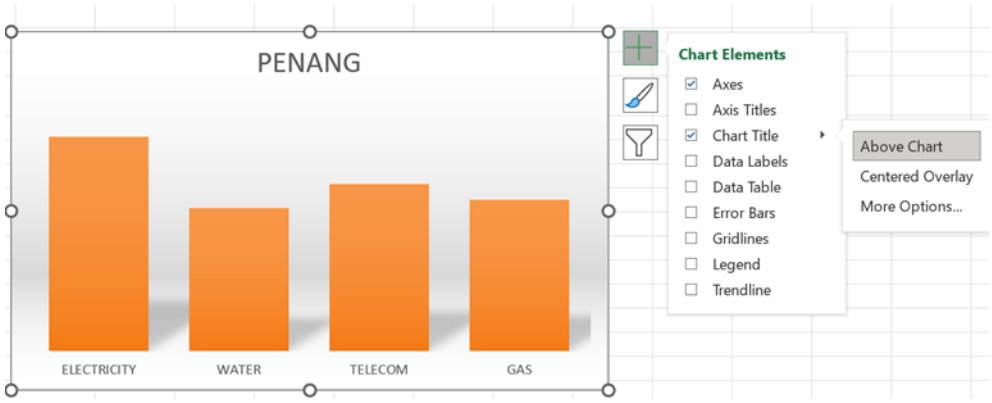
3. Select the sub-type you want (this is at the top of the preview window).



4. Click OK when done.

Display a Chart Title & Labels

1. Click anywhere on the chart you want to modify. Click on the  command.



2. Check Chart Title. A list of options appears:

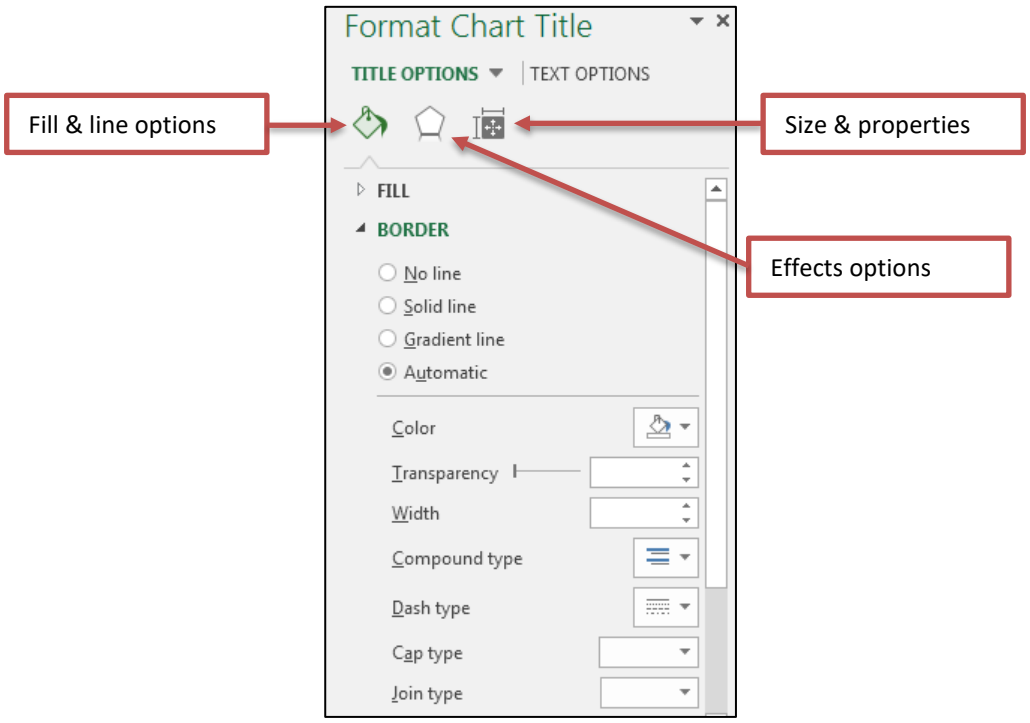
   Centered Overlay Title:- Centers the title over the chart but retains the existing size of the chart.

   Above Chart:- Centers the title over the chart but adds room at the top so the title doesn't interfere with the chart itself.

3. Make a selection. A box with text appears on the chart.

4. Type the desired title.

5. Optionally, choose More Options. The dialog box below appears.



6. Select Fill and then choose any desired background options for the chart title. Excel's Live Preview feature lets you view various options without first selecting them.

7. Select Line, Line Style, and other title options, including color, shadows, 3-D formatting & others.

8. Click ok.

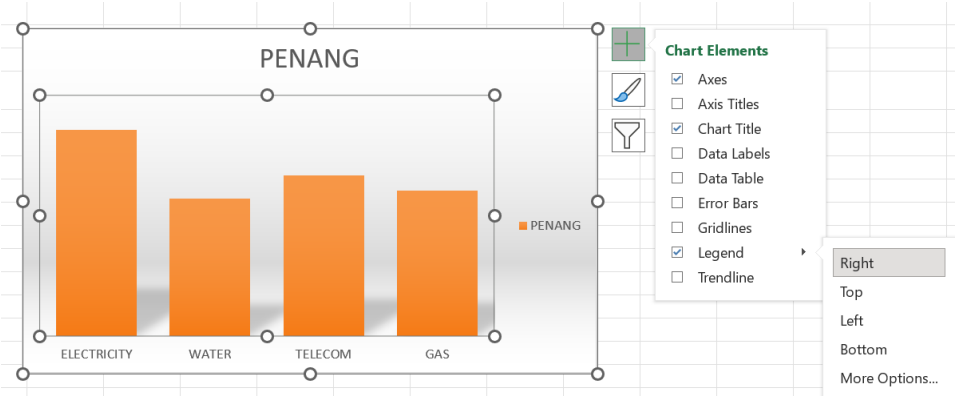
9. You can't apply 3-D formatting or select a shadow if your title doesn't have a border line around it.

Customize the Chart Legend

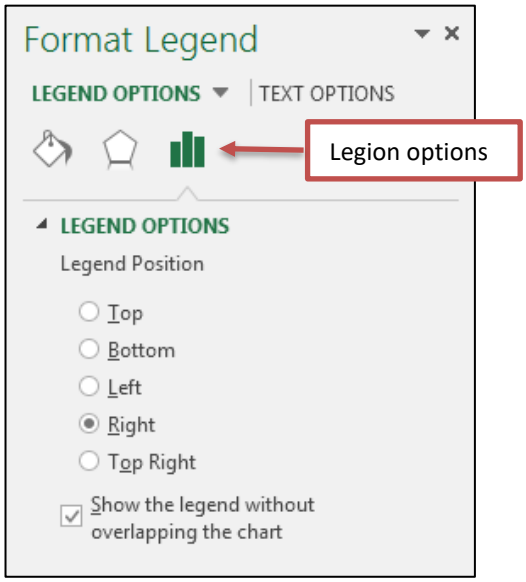
1. Click anywhere on the chart you want to modify. Click on the  command.

2. Check Legend and click the little arrow.

3. Select a placement for the legend.



4. To format the Legend further, Click More Options.



5. The More Legend Options box offers the same type of formatting options as the Chart Title. Choose any desired options. Click ok.

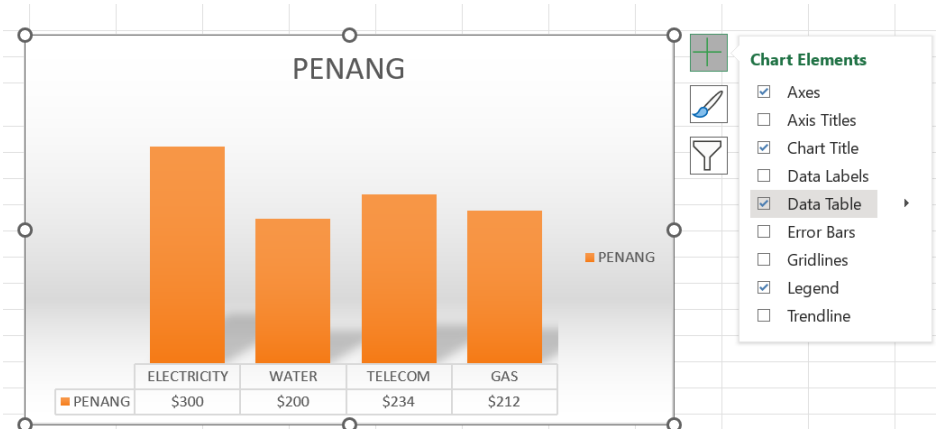
Displaying a Data Table in a Chart

In Excel, you can display a table of the data that you use in the chart. The data table appears below the chart. When you create a chart, you can select a layout that includes a data table.

To add a Data Table

1. Click anywhere on the chart you want to modify. Click on the  command.

2. Select the Data Table. Options include a choice not to show a data table, show a data table but not show a chart legend, or to show a data table and include the chart legend.

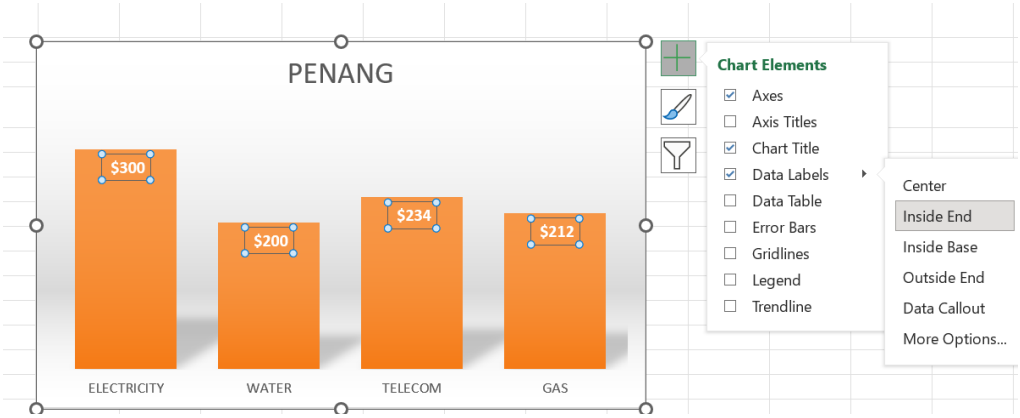


3. Select the Show Data Table option.

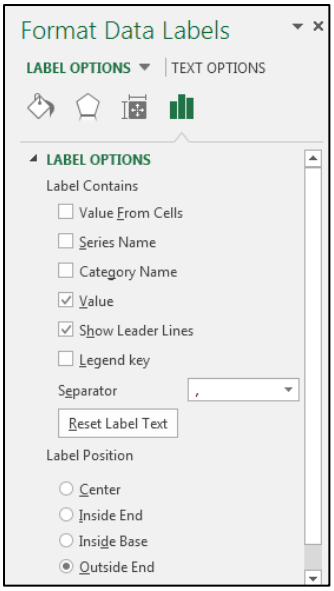
Data tables can be added to charts on a regular worksheet, but it isn't a common practice because the worksheet itself already displays the data. Data tables display the chart values in a grid beneath the chart. They are very helpful if a reader needs to see exact values along with a graphical display, such as when using a 3-D chart.

Show Data Labels

1. Click anywhere on the chart that you want to modify.
2. Select Data Labels. A sub menu of data label placement options appears.



3. Select a placement option. See the data labels with a placement of Outside End.
4. To format Data Labels, select More Data Label Options from the Data Labels drop-down options.. The Format Data Labels dialog box appears.



5. If you don't want the data label to be the series value, choose a different option from the Label Options area (such as the series or category names).

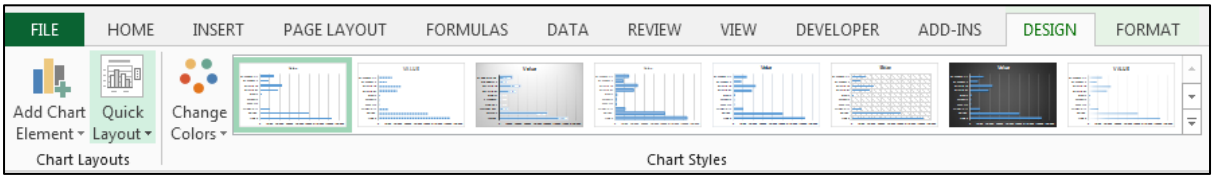
6. In the Number option, select a number style for the data labels.

7. Select any additional options and then click ok

Select a Chart Color Style

1. Click anywhere on the chart you want to modify.

2. From the Chart Tools Design tab, select Chart Styles and click the More button, which displays the Chart Styles gallery.



3. Select a chart theme.

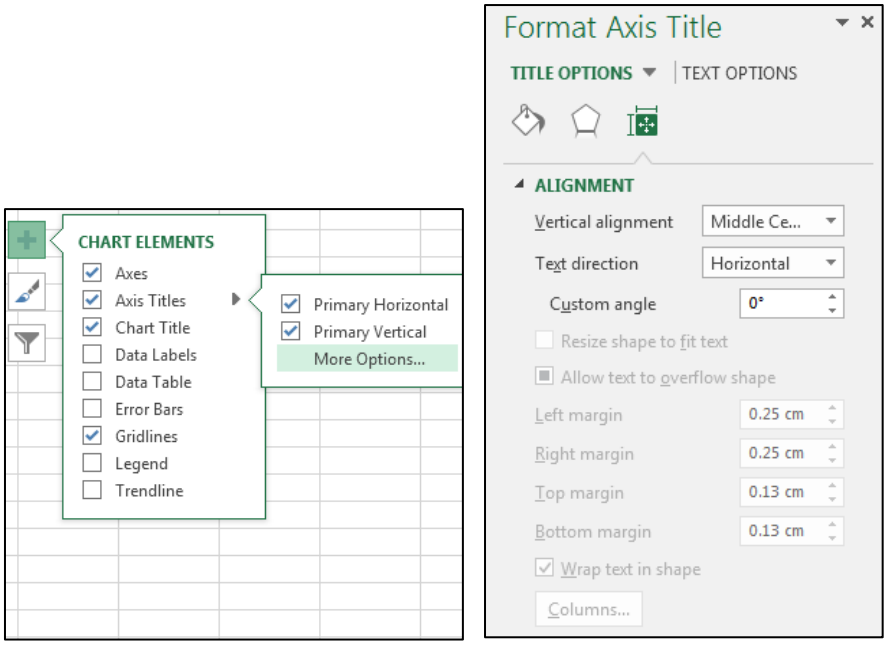
Change Axis Options

1. Click anywhere on the chart that you want to modify.

2. From the Chart elements select Axis Titles.

3. Select Primary Horizontal Axis Title or Primary Vertical Axis Title.

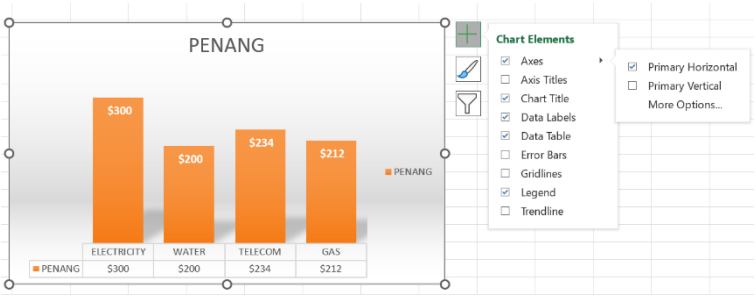
4. Choose an Axis title location. For the Horizontal axis, your choice is only Below the Axis (or None). For the Vertical axis, you have the option to rotate the title, run it vertically along the axis, or run it horizontally. We don't recommend the horizontal option because it takes up a great amount of chart space. Both a Vertical and a Horizontal Axis title.

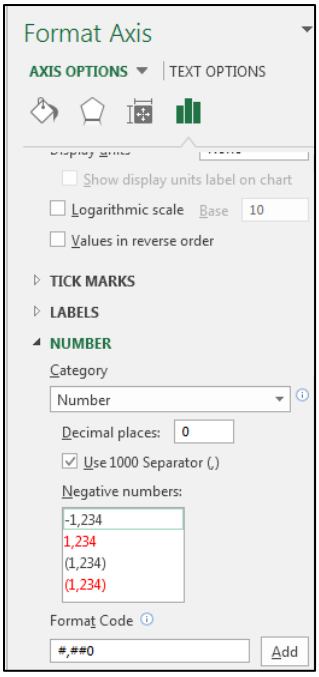


5. Highlight the axis text and replace it with your desired text.

Axes

Choose this option to change the way Excel displays either the horizontal or vertical axis. You can choose not to display an axis or you can change the value representation along the vertical axis. Click the More option to change choices such as axis-number formatting.

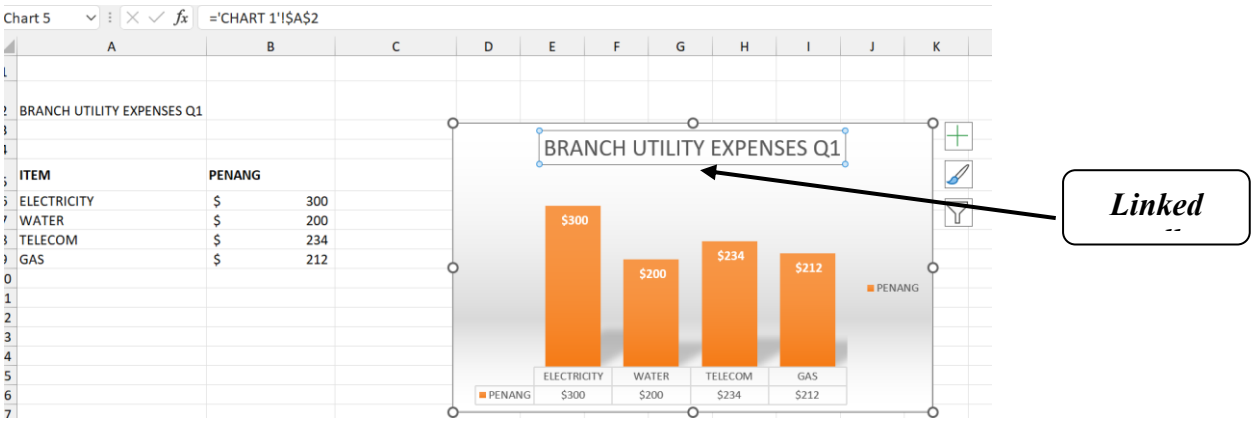




Adding Text Boxes With Links

You can also add a linked text box to a chart. The process is a bit tricky, however. Follow these steps exactly:

1. Select the chart and then choose Insert Text Box.
2. Drag the mouse inside the chart to create the text box.
3. Press Esc to exit text entry mode and select the text box object.
4. Click in the formula bar and then type an equal sign (=).
5. Use your mouse and click the cell that will be linked.
6. Press Enter.



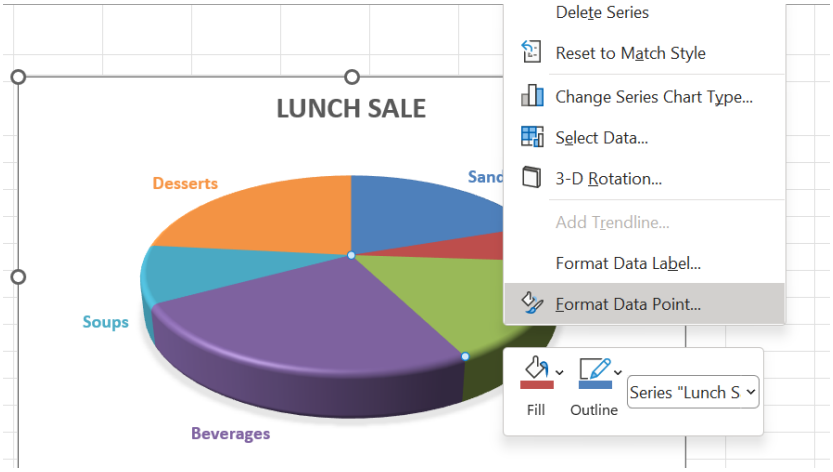
7. You can apply any type of formatting you like.

8. After you add a text box to a chart, you can change it to any other shape that supports text. Select the text box and choose Drawing Tools => Format => Insert Shapes => Edit Shape => Change Shape. Then choose a new shape from the gallery.

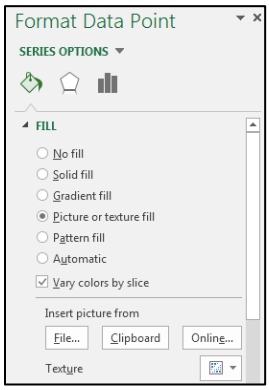
Place a Picture in a Data Series

1. Right-click the series or data point you want to modify. A shortcut menu appears.

2. Choose Format Data Point. The Format Data Point dialog box appears.

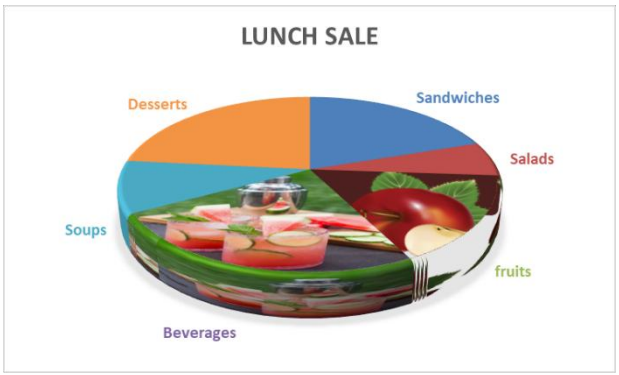


3. Click the Fill & line. Select Picture or Texture Fill.



4. Click File. The Insert Picture dialog box appears.

5. Locate and select the picture you want to use. Click Insert.

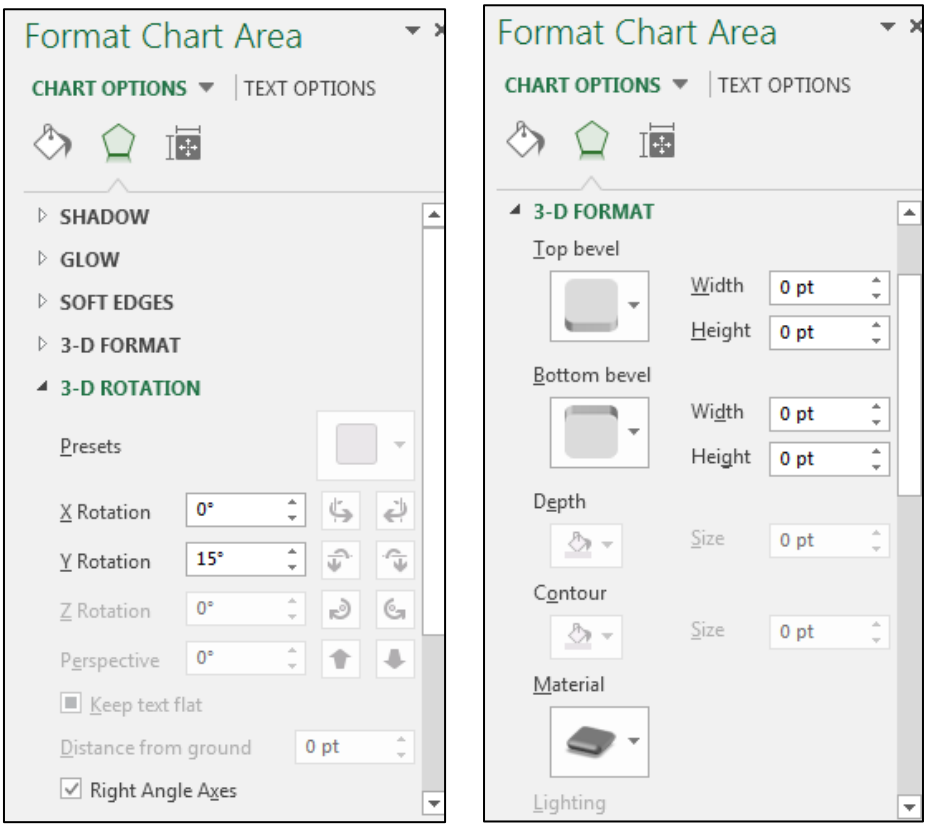


3-D Charts

Enhance a 3-D Chart

1. Click anywhere on the 3-D chart you want to modify.

2. From the Chart Tools Format tab click format selection. Click Effects on the Format Chart Area dialog box as shown below. The options you see depend on the chart type.



3. From the 3-D Rotation

   Click the X-axis left or right rotation arrows or enter the degree of left/right rotation (between 0 and 360) you want for the chart in the Rotation box. This rotates the pie slices left or right.
   Click the Y-axis up or down rotation arrows or enter the degree of up/down rotation. Click the Perspective up or down arrows to change the “camera" view or the view from the top. You can optionally type the elevation angle (between 10 and 80) in the Elevation text box.

4. From the 3-D Format option

   Choose a Rotation Preset option to select a bevel style for the top or bottom of the chart border.
   Change the thickness of the bars or height of pie slices by entering a value (between 5 and 500) in the Height box.

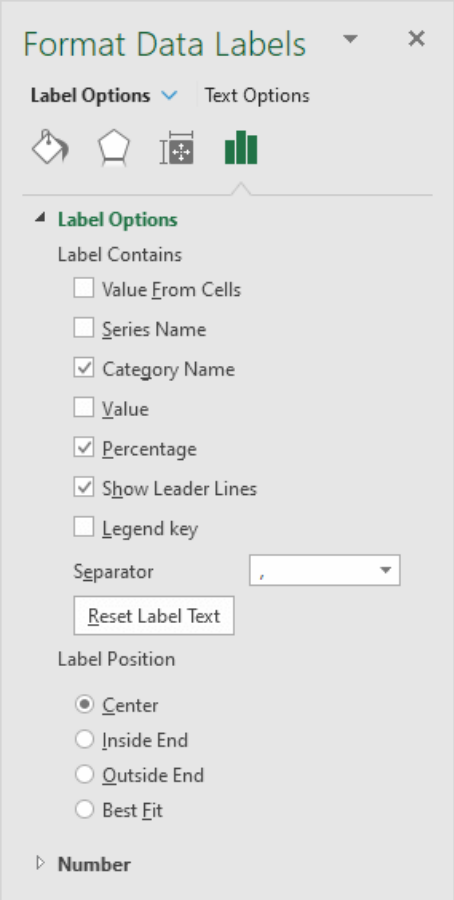
Change the Depth option to deepen series bars and the chart floor. This option does not apply to pie charts. Values range from 0 – 2000

5. Click Close. The chart appears on-screen, rotated to the angles you selected. A 3-D pie chart before and after changing the elevation and rotation

Adding percentages to Pie Chart.

Right Click the pie chart and click Format Data Labels

Check Category Name, uncheck Value, check Percentage and click Centre.



Module 9

Passwords and Common Keyboard Shortcut Keys

Protecting Your Files and Worksheets

Protection of documents and cells can help prevent inadvertent changes to your worksheet. This can be especially helpful if you have someone who is unfamiliar with worksheets or doing your data entry, or if you spent many hours struggling to get the worksheet right.

Excel offers the option of protecting the entire document, individual objects, the structure of a window, and/or specific cells. With Excel, you can even add a password to the file. If you want to prevent changes to sheets or cells, you need to lock the cells and then protect the sheet.

Protection Options

When you are protecting your workbook, you have two primary options:

- **Prevent data entry for select cells**
  Users can access the worksheet and view the information; however, access for making changes is restricted.
- **Restrict or prevent access to the file**
  Users can be prevented from viewing the worksheet, or users can view the workbook but not make changes to it.

Locking & Unlocking Cells

Excel can protect cells, graphics, charts, and other worksheet objects. This protection will take effect only after you turn on the Worksheet Protection option in the *Protect Sheet* dialog box. If you enable protection, no changes can be made to a cell until you unlock that cell.

Locking Cells

You can easily lock any cell in a worksheet.

NOTE: Make sure to lock the cells before you protect the sheet or document. Once a sheet or a document has been protected, you cannot access menu selections that allow you to make changes to cells.

1. Select the cell(s) to be locked.
2. From the *Ribbon*, select the ***Home*** command tab.
3. In the *Cells* group, click **FORMAT.**
4. In the *Protection* section, select ***Lock.*** NOTE: If the icon is highlighted, the cells are locked.
5. Protect the worksheet.

Unlocking Cells

In order to unlock cells, sheet protection must first be turned off.

1. Unprotect the worksheet.
2. Select the cells you want to unlock.
3. From the *Ribbon*, select the ***Home*** command tab.
4. In the *Cells* group, click **FORMAT.**
5. In the *Protection* section, deselect ***Lock.*** The cells are unlocked.

   NOTE: If the icon is not highlighted, the cells are unlocked.

Workbook Level Protection

You can prevent a workbook from having its structure and windows modified or resized by another user.

Protecting the Workbook

1. From the *Ribbon*, select the ***Review*** command tab.
2. In the *Changes* group, click **PROTECT WORKBOOK.** The *Protect Workbook* dialog box appears.
3. Select the appropriate option(s):
4. Structure - Prevents the user from changing the order of the sheets within a workbook. This includes adding or deleting worksheets.
5. Password - Allows only those who know the password entered in this text box to turn the workbook protection off.
6. Click OK. The workbook is protected.

Unprotecting the Workbook

1. From the *Ribbon*, select the ***Review*** command tab.
2. In the *Changes* group, click **PROTECT WORKBOOK.** The workbook is unprotected. Users can now modify the structure and windows of the workbook.

NOTE: If you include a password when you turned the protection on, you must enter the password to turn the protection off.

Worksheet Level Protection

You can protect a single worksheet from being modified by another user.

Protecting the Worksheet

1. From the *Ribbon*, select the ***Home*** command tab.
2. In the *Cells* group, click **FORMAT.**

3. In the *Protection* section, select ***Protect Sheet.*** The *Protect Sheet* dialog box appears.

4. In the Protect Sheet dialog box, select the appropriate options:

5. Protect worksheet and contents of locked cells - Prevents changes to locked cells.

6. Password to unprotect sheet -Allows only those who know the assigned password to unprotect the worksheet.

7. Allow all users of this worksheet to -Checked boxes are aspects that any user can access.

8. Click OK. The worksheet is protected.

Unprotecting the Worksheet

1. From the *Ribbon*, select the ***Home*** command tab

2. In the *Cells* group, click **FORMAT**

3. In the *Protection* section, select ***Unprotect Sheet...*** The worksheet is unprotected. Users can now modify the worksheet.

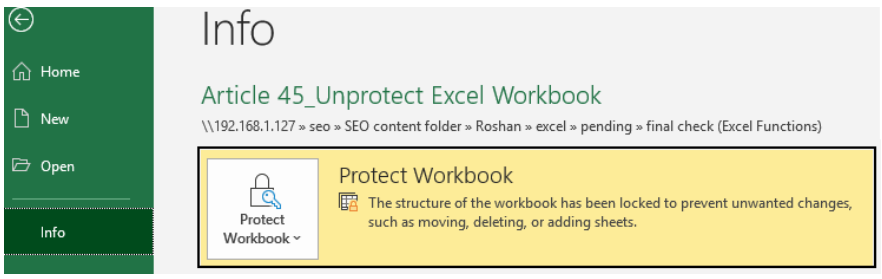
NOTE: If you included a password when you turned the protection on, you must type the password in the *Password* text box to turn the protection off.

File Level Protection

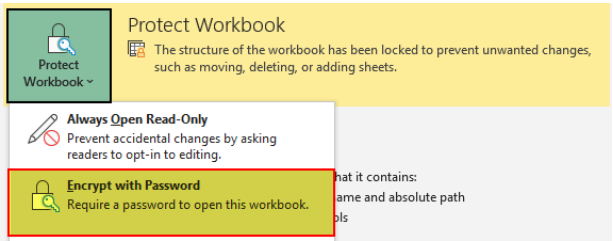
Using this method, we restrict the user from peeping into the workbook. Follow the below steps to protect the workbook at the workbook level.

Step 1: Go to the "File" option, which is the first in the ribbon.

Once we click on the "File" option, we may see the **Protect Workbook** option on the right-hand side, as shown in the below image.



Step 2: In the "Protect Workbook" option, click on the [drop-down list in excel] to see the option of "Protect Workbook" in the list, and select "Encrypt with Password."



Step 3: Now, we will see the "Encrypt Document" window. Enter the password and click on the "OK" button.

Step 4: Now, in the next window, we will see the window which asks us to re-enter the password we entered in the previous step.

One thing is we need to remember the password that we have entered. Once you have re-entered the password, save and close the workbook. All the changes that we made will apply to the workbook.Next time when we need to open the workbook, it will ask us to enter the password.

Unprotect Excel Workbook

Once the workbook is protected with a password, to unprotect, we need to remember the exact password that we have entered while preserving the workbook. Follow the below steps to unprotect the protected workbook in Excel.

Step 1: Open the desired workbook.

Step 2: While opening, it will ask you to enter the password.

Step 3: Enter the password that you had given while protecting it.

Step 4: Click on "OK." It will open the workbook.

Step 5: To unprotect, click on the "File" tab. You will see the "Protect Workbook" option.

As we can see just below the "Protect Workbook" option, it says, "A password is required to open this workbook."

Step 6: Click on the drop-down list, and choose **"Encrypt with Password."**

Step 7: Now, we will see the below window.

We can see the password with black dots, so to unprotect the workbook, delete the password and click on "OK."

The Excel workbook is unprotected and no longer requires the password to open it.

Things to Remember

- Password is mandatory to open the workbook if it is protected with a password.
- But for unprotecting, the workbook password is not required. We can delete the password and unprotect the workbook.
- The "Protect Workbook" and "Protect Worksheet" are different from each other.

Using Templates in Excel

Browse Templates

Go to File > New and explore built-in categories like budgets, calendars, invoices, and planners to jumpstart your work.

Customize a Template

After opening a template, modify layouts, formulas, and formatting to match your specific needs before saving.

Save as Template

Use File > Save As and choose the .xltx format to store your custom workbook as a reusable template.

Share Templates

Place template files in a shared network folder or OneDrive so your entire team can access them.

Shortcuts in Spreadsheets

`Ctrl + C`	Copy selected cells
`Ctrl + V`	Paste copied content
`Ctrl + Z`	Undo your last action
`Ctrl + S`	Save the current workbook
`Ctrl + B`	Toggle bold formatting
`Ctrl + F`	Open Find and Replace dialog
`Ctrl + Home`	Jump to cell A1 instantly
`Ctrl + End`	Go to the last used cell
`F2`	Edit the active cell directly
`Ctrl + Shift + L`	Toggle AutoFilter on and off
`Alt + =`	Insert an AutoSum formula
`Ctrl + ;`	Insert today's date