Excel Assignment 5

1. What is a ribbon in Excel?

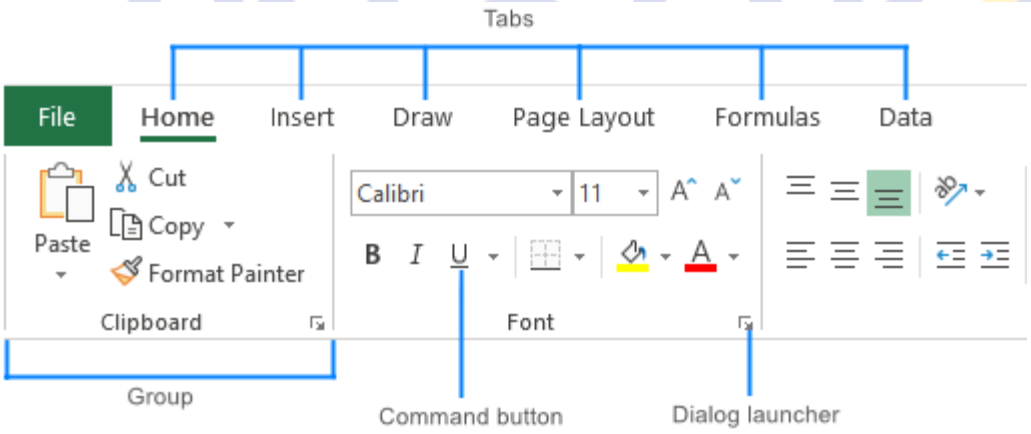
Answer:

Microsoft Excel ribbon is the row of tabs and icons at the top of the Excel window that allows you to quickly find, understand and use commands for completing a certain task. It looks like a kind of complex toolbar, which it actually is.

The ribbon first appeared in Excel 2007 replacing the traditional toolbars and pull-down menus found in previous versions. In Excel 2010, Microsoft added the ability to personalize the ribbon.

The ribbon in Excel is made up of four basic components: tabs, groups, dialog launchers, and command buttons.

- **Ribbon tab** contains multiple commands logically sub-divided into groups.
- **Ribbon group** is a set of closely related commands normally performed as part of a larger task.
- **Dialog launcher** is a small arrow in the lower-right corner of a group that brings up more related commands. Dialog launchers appear in groups that contain more commands than available space.
- **Command button** is the button you click to perform a particular action.



Ribbon tabs

The standard Excel ribbon contains the following tabs, from left to right:

File – allows you to jump into the backstage view that contains the essential file-related commands and Excel options. This tab was introduced in Excel 2010 as the replacement for the Office button in Excel 2007 and the File menu in earlier versions.

Home – contains the most frequently used commands such as copying and pasting, sorting and filtering, formatting, etc.

Insert – is used for adding different objects in a worksheet such as images, charts, PivotTables, hyperlinks, special symbols, equations, headers and footers.

Draw – depending on the device type you're using, it lets you draw with a digital pen, mouse, or finger. This tab is available in Excel 2013 and later, but like the Developer tab it is not visible by default.

Page Layout – provides tools to manage the worksheet appearance, both onscreen and printed. These tools control theme settings, gridlines, page margins, object aligning, and print area.

Formulas – contains tools for inserting functions, defining names and controlling the calculation options.

Data – holds the commands for managing the worksheet data as well as connecting to external data.

Review – allows you to check spelling, track changes, add comments and notes, protect worksheets and workbooks.

View – provides commands for switching between worksheet views, freezing panes, viewing and arranging multiple windows.

Help – only appears in Excel 2019 and Office 365. This tab provides quick access to the Help Task Pane and allows you to contact Microsoft support, send feedback, suggest a feature, and get quick access to training videos.

Developer – provides access to advanced features such as VBA macros, ActiveX and Form controls and XML commands. This tab is hidden by default and you have to enable it first.

Add-ins – appears only when you open an older workbook or load an add-in that customizes the toolbars or menu.

2. What is the order of operations used for evaluating formulas in excel?

Answer:

When evaluating a formula, Excel follows a standard math protocol called "order of operations". In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction) but with some customization to handle the formula syntax in a spreadsheet.

First, any expressions in parentheses are evaluated. Parentheses essentially override the normal order of operations to ensure certain operations are performed first.

Next, Excel will resolve references. This involves replacing cell references like A1 with the value from the cell, as well as evaluating range references like A1:A5, which become arrays of values. Other range operations like union (comma) and intersection (space) also happen at this time.
Next, Excel will perform exponentiation, negation, and percent conversions (in that order), followed by multiplication and division, addition and subtraction, and concatenation. Finally, Excel will evaluate logical operators, if present.
In summary, Excel solves formulas in the following order:

1. Parentheses
2. Reference operators
3. Exponents
4. Negation

5. Percent
6. Multiplication and Division
7. Addition and Subtraction
8. Concatenation
9. Logical operators

Note: If a formula contains multiple operators with the same priority (e.g. multiplication and division, or addition and subtraction), Excel will evaluate the operators from left to right.

3. **Reverse the string in the excel column and check whether the string is palindrome or not in the next column for each value.**

Word	Reverse Word	Is Palindrome
EYE	EYE	TRUE
EAR	RAE	FALSE

Answer:

If you enter a word or phrase in column B, it would tell you whether it is a palindrome or not.

But what is a palindrome?
A palindrome is a word, phrase, verse, or sentence that reads the same backward or forward. For example: A man, a plan, a canal, Panama!
[definition from **palindromelist.net**]

So, to check if a cell contains palindrome, we need to reverse the cell contents and see if both original and reverse are the same.

For example if B1 contains MAN, then the reverse would be NAM and hence MAN is not a palindrome

4. **Is it possible to protect value from being copied from the cell? If yes, then how to implement it.**
   Answer:
   Yes, it is possible. In order to protect your worksheet from getting copied, you need to go into Menu bar >Review > Protect sheet > Password. By entering password, you can secure your worksheet from getting copied by others.
   By default, when you protect a worksheet, all the cells on the worksheet are locked, and users cannot make any changes to a locked cell.

   To set a password to protect cells, follow the steps given below:

   1) Go to REVIEW tab and click on "Protect Sheet" option.

   2) Excel opens the Protect Sheet dialog box. By default, Excel selects the Protect Worksheet and Contents of Locked Cells check box.

   3) Select any of the check boxes in the Allow All Users of This Worksheet To list box (such as Format Cells or Insert Columns) that you still want to be functional when the worksheet protection is operational.
   The Select Locked Cells and Select Unlocked Cells check boxes are selected by default.

4) Type the password in the 'Password to unprotect Sheet' text box.

5) Click OK.

6) Excel opens the Confirm Password dialog box. Re-enter the password in the Reenter Password to Proceed text box and then click OK. Notice that if you try to edit a cell, Excel displays an error message.

-- To remove worksheet protection, click the Unprotect Sheet button in the Changes group on the Review tab. You'll be prompted to type the password that you had set for protection.

5. **What is the use of Name Box in MS-Excel?**
   Answer:
   In Microsoft Excel, the **Name Box** displays the cell that is currently selected in the spreadsheet. It is located to the left of the formula bar. If a name is defined for a cell that is selected, the Name Box displays the name of the cell. You can use the Name Box to define a name for a selected cell, as well. The picture shows an example of the Name box in Microsoft Excel.

The box located to the left side of the formula bar which addresses the selected cell or group of cells in the spreadsheet is called Name box. In the below screenshot highlighted with a red color box is the Name box

This Name box helps to address the group of cells with a name instead of addressing rows and columns combination. This tutorial will cover how to create a Name box and how to use it while working with data.

How to Give Name in Name Box?
Consider a small example of student's data like below. In the below screenshot Name box representing the selected cell A1

Now we will select the student data alone from the table, excluding the header "Students"

After selecting the data, go to the name box and type the name which you want to name the data range. Here I am giving the data range name as "Students".