

Class 6

Subject: Computer Science

Title of the Book: IT Planet Petabyte

Chapter 3: Excel – Creating Worksheet

GENERAL INSTRUCTIONS:

- Exercises to be written in the book.
- You Tube link is for the explanation of creating excel worksheets.

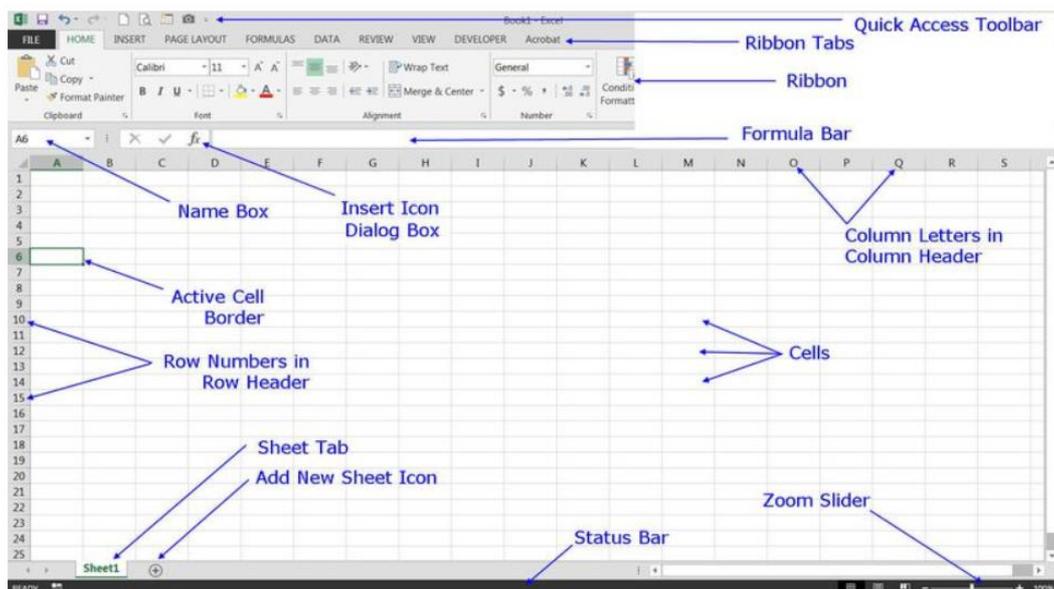
YouTube Link:

- <https://youtu.be/rwbho0CgEAE>

INTRODUCTION:

- Microsoft Excel (MS Excel) is a spreadsheet program designed for everyday tasks such as setting up a budget, maintaining an address list or keeping track of a list to-do items.
- Entering data is the first step in creating a worksheet.
- While working in excel you must save your workbook to re-use or share it with others.
- You must select cells in Excel to perform editing, calculating and formatting.

Opening screen of Microsoft Excel



EXPLANATION:

Microsoft Excel is a spreadsheet program that is used to record and analyze numerical data. Excel allows you to organize data in rows and columns. These rows and columns are collectively called worksheet.

A spreadsheet file is called workbook which is like a notebook having many worksheets. Each worksheet of Excel has 16384 columns and 1048576 rows. A letter identifies each column and a number identifies each row. The column letters begin with A and end with XFD, row numbers begin with 1 and end with 1048576.

The intersection of a row and a column is called cell. Cell may contain three types of data: Labels (text), Values (numbers) and Formulas.

Uses of Excel:

Analyzing and storing data: In MS Excel you can analyze larger amounts of data to discover trends. With the help of graphs and charts, you can summarize the data and store it in an organized way.

Mathematical formulas make things easier: MS Excel makes easy for you to solve complex mathematical problems in a much simpler way without much manual effort. There are so many formulas in MS Excel and by using these formulas you can implement lots of operation like finding sum, average etc.

Online Access: MS Excel can be accessed online from anywhere and everywhere which means that you can access it from any device from any location whenever you want.

Excel tools makes your work easier: There are wonderful tools for sorting, filtering and searching which all the more make your work easy.

Features of Excel:

Index Match: You can use it to look up a value in a big table of data and return a corresponding value in that table.

Filters: Filtering effectively hides data that is not of interest. In more versions of Excel you can now also filter on number values.

Create charts and objects: Excel helps you to create colorful charts from worksheet data to visually display the data.

Extend formula across/down: The beauty of Excel is its easy scalability. Get the formula right once and Excel will churn out the right calculation a million times.

Starting Excel:

1. Start button
2. Click on Excel
3. Click on blank workbook
4. An empty workbook titled Book 1 is displayed in the Excel window.

Creating Worksheet:

Excel automatically left aligns the text data and right aligns the numbers in a cell.

Entering data:

1. Open a blank worksheet.
2. Click on the cell where you want to enter data.
3. Type the data
4. Press Enter key to enter the data and move down one cell.

Saving a workbook: By default, Excel workbooks are saved in the Excel file format which uses the .xlsx file extension.

1. Click on File tab.
2. Click on Save or Save As. Click on Browse.
3. Save As dialog box will appear.
4. Type the name for the file.
5. Click on Save.
6. The new file name appears on the title bar.

Selecting cells: The easiest way to select a cell is to move the mouse pointer to the cell and click on it. You can also select a cell in a worksheet using the Arrow key. A cell is selected(active) when a dark border surrounds the cell. Selected group of cells is called a range.

To select a Row range: Click on the number of the row or row heading you want to select.

To select a Column range: Click on the letter of the column or column heading you want to select.

To select a group of cells: Place your mouse pointer over the first cell you want to select. Drag the mouse until you highlight all the cells you want to select.

Editing data in the worksheet: Editing means the process of making changes to any data or cells in the worksheet.

1. Double click on the cell containing the data you want to edit. A flashing insertion point appears in the cell.
2. Press the Arrow keys from the keyboard to move the insertion point from where you want to remove or add characters.
3. To remove the character to the left of the flashing insertion point, press the Backspace key.
4. To add the data where the insertion point flashes on the screen, type the data.
5. When you finish making changes to the data, press the Enter key.

Deleting data: Select the cells containing the data you want to delete. Press the Delete key.

Undoing changes: Excel remembers the last change you made to the worksheet. If you do not want to make these changes, you can cancel them using the Undo feature.

Moving data: When you move data, the data disappears from its original location.

Copying data: When you copy data, the data appears in both the original and the new locations.

Changing column width: Place the mouse over the right edge of the column heading. Drag the column edge until the gray line displays the column width you want. The default

column width of a cell is 8.43 (measured in characters). The default row height is 15.00 (measured in points).

Inserting a row:

1. Select the row where you want to insert a new row.
2. Click on Home tab.
3. Click on the down arrow of the Insert.
4. Click on Insert sheet rows.

Inserting a column:

1. Select the column where you want to insert a new column.
2. Click on Home tab.
3. Click on the down arrow of the Insert.
4. Click on Insert sheet columns.

Deleting a row:

1. Select the row you want to delete.
2. Click on Home tab, then click on the down arrow of Delete.
3. Click on Delete sheet rows. Excel will delete the rows.

Deleting a column:

1. Select the column you want to delete.
2. Click on Home tab, then click on the down arrow of Delete.
3. Click on Delete sheet columns. Excel will delete the columns.

Generating a Series:

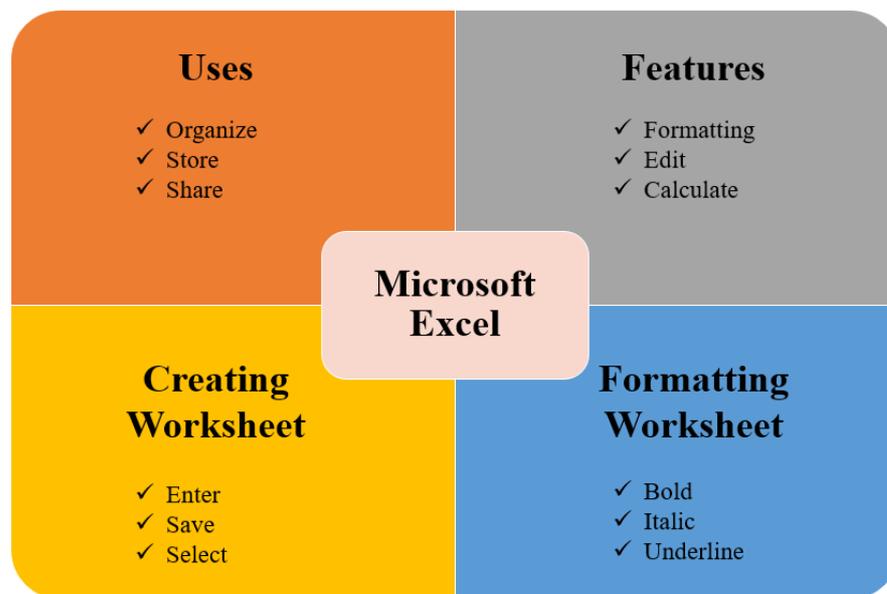
Auto Fill feature of Excel is used to add duplicate entries or a data series to your worksheet cells. You can create your own custom data lists as well as use built- in lists of common entries.

Formatting Worksheet:

Formatting displays the worksheets in an attractive and more legible outlook. You can make your worksheets more presentable by applying one or several of Excel formatting features. You can improve the appearance of your worksheet data by:

1. Changing the font of data.
2. Changing the font size of data.
3. Centering data across columns.
4. Bold, Italic and Underlined data.
5. Changing the alignment of data.
6. Changing the color of cells.
7. Changing the color of data.
8. Adding borders.
9. Adding conditional formatting.

Mind Map





Exercises

A. Tick [✓] the correct answer.

1. b.
2. c.
3. a.
4. b.
5. c.
6. b.

B. Write 'T' for True and 'F' for False statements.

1. F
2. T
3. F
4. T
5. F
6. T
7. T
8. F

C. Fill in the blanks.

1. 1048576, 16384
2. Letter, Number
3. Undo
4. Merge and Center
5. Border

D. Differentiate between the following.

1. **Workbook:** A spreadsheet file is called workbook which is like a notebook having many individual worksheets.
Worksheet: Excel allows us to organize data in rows and columns. These rows and columns are collectively called a worksheet.
2. **Row Heading:** A row number on the left side of the grid is called row heading, it identifies each row.
Column Heading: A column heading is the coloured row of letters which is used to identify each column within the sheet.
3. **Undo feature:** It is used to cancel the last change we made in our worksheet.
Redo feature: It is used to reverse the result of the undo feature.
4. **Moving Data:** It allows us to re-organize data in our worksheet. When we move data, the data disappears from its original location.
Copying Data: It allows us to copy data in our worksheet without retyping. When we copy data, the data remains in its original location and at the same time appears in the new location.

E. Answer in 1-2 sentences.

1. Microsoft Excel is a powerful spreadsheet program that allows us to organize data, complete calculations, represent data in graphs and develop reports.
2. The default column width of a cell is 8.43 (measured in characters) and the default row height is 15.00 (measured in points).
3. Formatting displays the worksheets in an attractive and more legible outlook. We can make our worksheets more presentable by applying one or several of Excel formatting features.
4. Borders are used in worksheet cells to separate the data from surrounding cells.

F. Answer Briefly.

1. There are various features of Excel such as:
 - i. Editing and formatting data
 - ii. Using formulas and functions
 - iii. Printing worksheets
 - iv. Creating charts and objects
2. Alignment means the way in which the data is settled within the boundary of a cell. The different alignment buttons are: Align Left, Center, Align Right, Top Align, Middle Align, and Bottom Align. By default, Excel automatically aligns text data to the left and number data to the right.
3. Conditional Formatting feature of Excel allows us to apply certain formatting options such as background color, borders, or font formatting to data that meets certain conditions. Conditional formatting is applied to one or more cells.

G. Application Based Question.

To add a row in the table without disturbing the whole table, we can use the insert sheet rows option.