

SPREADSHEETS

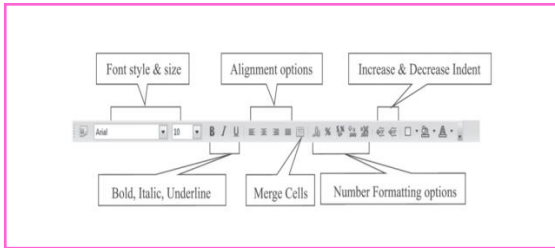
- To start OpenOffice Calc:
Start → All programs → OpenOffice
4.1.1 → OpenOffice Calc

COMPONENTS OF CALC APPLICATION WINDOW:

- Title Bar: It is located on the top of the application window. It displays the name of the workbook and the name of the application. The window control buttons (Minimize, Maximize/Restore and Close) are present on the extreme right of the title bar.
- Menu Bar: Below the title bar is the menu bar which contains various menu items - File, Edit, View, Insert, Format, Tools, Data, Window and Help. The menu bar gives access to basic commands used in Calc.
- Standard Toolbar: Below the menu bar is the Standard toolbar which contains buttons for frequently used commands such as New, Open, Save, Print, Cut, Copy, Paste etc. This toolbar is also known as Function toolbar.
- Formatting Toolbar: This toolbar consists of commands that help in formatting text and number data like font style, size, colour, bold, italic, underline, various number formats etc.
- Formula Toolbar: This toolbar contains the Name box and the Formula bar.
- Rows and Columns: The entire worksheet is divided into horizontal rows and vertical columns. The rows are numbered on the left side of the worksheet as 1, 2, 3...and so on. The columns are named on the top of the application window as A, B, C...and so on.
- Cells: The rows and columns in a spreadsheet intersect to form the smallest unit of a worksheet i.e., a cell.
- Active Cell: It is the cell that is currently active or selected.
- Sheet Tabs: The sheet tabs are present at the bottom of the worksheet. These are named as Sheet1, Sheet 2, Sheet 3 and so on. The active sheet tab indicates the current worksheet.
- Status Bar: This is located at the bottom of the Calc Application window and it displays information about the current worksheet.
- Scroll Bars: There are two scroll bars on the Writer Window:
 - Horizontal Scroll Bar: It helps to navigate left and right of the worksheet.
 - Vertical Scroll Bar: It helps to navigate the up and down of the worksheet.
- Docking Toolbars: On the extreme right of the Calc window, there are five icons – Properties, Styles and Formatting, Gallery, Navigator and Functions.
- CREATING A NEW WORKBOOK: File → New → Spreadsheet
- SAVING A WORKBOOK: File → Save As → Browse the folder where the file has to be saved → Type the name with which the file has to be saved → Click Save

- **OPENING AN EXISTING WORKBOOK:** Click File → Open → Browse the folder where the file to be opened exists → Select the file and click Open
 - **CLOSING A WORKBOOK:** click Close button (X) on the top right corner of the Title bar or click File → Exit option
 - **ENTERING DATA:** The data is entered in the cells of a worksheet. The data that we enter may be in the form of text, numbers or formulas. Entries containing an alphabet or a character even if they start with a number are called text entries. The data on which arithmetic calculations can be performed is known as numerical data or value.
 - **ENTERING FORMULAS:** The formula always starts with an equal (=) sign. For example if, we want to add two numbers, say 20 and 30, we will type =20+30 in the active cell.
 - **SELECTING A CELL/RANGE OF CELLS:**
 - To select a single cell, click on that cell. This currently selected cell is known as the active cell.
 - To select the entire row or column, click on the row number or column name
 - To select adjacent range of cells, place the mouse pointer in the first cell in the range. Thereafter click and drag the mouse pointer in the direction of selection till the last cell in the range is selected.
 - **DELETING CELL CONTENT:** Select the cell or range of cells whose contents are to be deleted or right click on the selected cells and click Delete
- Contents from the shortcut menu, the Delete Contents dialog box will be displayed.
- **COPYING CELL CONTENT:** Select the cell or range of cells whose data needs to be copied, Click Copy button on the standard toolbar.
 - **INSERTING CELLS/ROWS/COLUMNS:** Select the cell or range of cells where you want to insert new cell, row or column. Right click and choose Insert option. The Insert Cells dialog box is displayed.
 - **AUTOFILL FEATURE:** AutoFill feature of OpenOffice Calc is used to fill sequential data in the cells to form a series automatically. The series to be formed may be numerical or alphabetical. OpenOffice Calc automatically fills the range of cells with the appropriate data.
 - **SORT LISTS:** We can create our own Sort Lists by following the steps given below:
 - Click Tools → Options.
 - Click the plus sign (+) before OpenOfficeCalc option
 - From the list of options click Sort Lists option.
 - Click New button. The cursor appears in the Entries box.
 - Type each entry (in the desired order), pressing Enter key after each list item.
 - Click the Add button. In the Lists box, the new list appears in the same order as we entered in the Entries box.

FORMATTING TOOLBAR:



- **TEXT FORMATTING:** Format → Cells → Alignment tab → In the Text orientation section, set the degrees by which the text has to be rotated. The preview shows the text accordingly → Click OK button
- **MERGING AND WRAPPING TEXT:** To merge cells, select the range of cells to be merged and click Merge Cells button on the formatting toolbar.
- **NUMBER AND DATE FORMATTING:** Select the cell(s) → Select Format → Cells → Select the Numbers tab → Choose the desired Category and then the desired Format → Click OK
- **USING FUNCTIONS:** Functions are predefined formulas in any spreadsheet application. Various functions are provided by Calc to perform various operations on numerical, date, time and text data. These functions may perform mathematical operations like addition, subtraction, multiplication, average etc., or may display current date and time or may join two texts and so on.
- All functions must begin with an equal (=) sign. The basic structure of a function is shown below: = Name of function (argument list)
- **SUM () FUNCTION:** The Sum () adds the numbers given in the argument list. The result is displayed in the active cell containing the function. The

syntax for Sum () is =Sum (num1; num2; num3; ..)

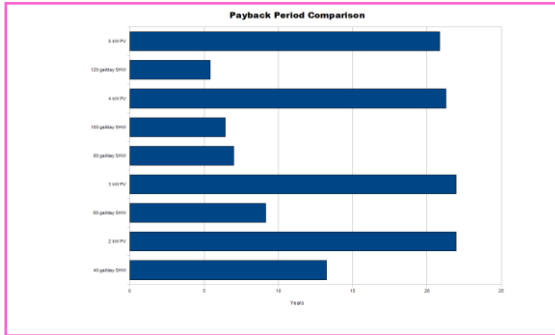
- **AVERAGE() :** This function is used to calculate average of all the arguments being passed. Click on cell where average has to be displayed and type = Average (B2:B6). Press Enter key to display the average marks.
- **LEN():** This text function displays the total number of characters in a cell.
- **TODAY():** This function displays the system date and does not take any argument
- **CELL REFERENCING:** Cell reference is the address of the cell. By using cell referencing we can refer to a cell or a range of cells in a formula itself. In this way, the formulas will show updated results automatically if the value in a particular cell, being used in the formula changes or if the source cells are copied or moved. Based on how a cell reference in the formula is to be copied and used, cell referencing is of three types – relative referencing, absolute referencing and mixed referencing.
- **SORTING OF DATA:** Sorting means arranging data in ascending or descending order. The data to be sorted may be numeric or textual or both.
- **FILTERING DATA:** Filter feature of OpenOffice Calc blocks or hides the data based on specified criteria for a column. Unlike sorting, the data is not rearranged in case of filtering. Instead, the filtered subset of data is extracted and the rest is temporarily hidden from the user. This filtered data can then be edited, analysed, formatted or even printed.

MAKING CHARTS IN CALC:

- **BAR CHART:**

Feature: Displays data in the form long bars of different height, vertically or horizontally.

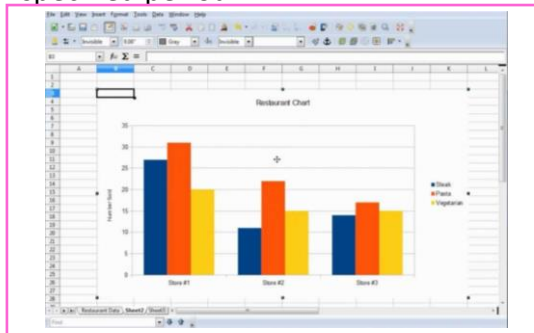
Application: Demonstrate comparison among individual items.



- **COLUMN CHART:**

Feature: Data is represented in the form of vertical bars.

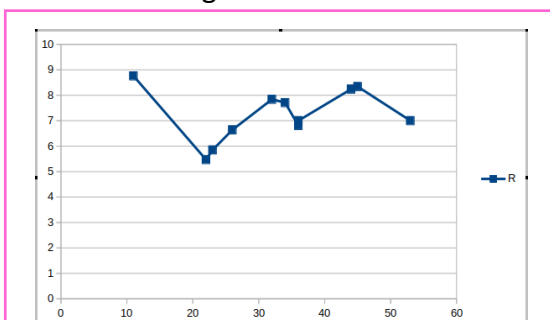
Application: Used to emphasize comparison of data items within specified period



- **LINE CHART:**

Feature: Series of data points are connected together with a line.

Application: Used to display data trends at regular intervals.



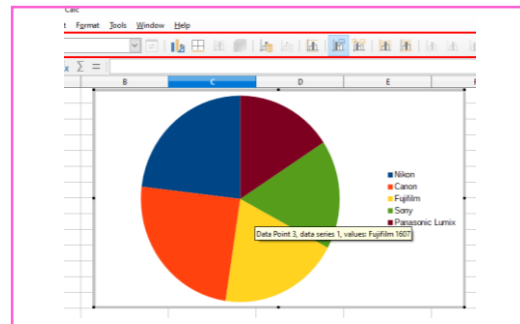
- **AREA CHART:**

Feature: It is based on a line chart but the area between the axes and the lines is filled with different colours

Application: Used to highlight change over time or to display quantitative data graphically.

- **PIE CHART:**

Feature: Data is displayed in the form of circles divided into sectors whose size is proportional to the value it represents. Application: Used to demonstrate the proportional size of the item with respect to sum of all items.



- **XY(SCATTER) CHART:**

Feature: It is used to depict the relationship of numerical values using variety of data series. The location of points represents the value of the chart and the set of points depicts the data series.

Application: Used to analyse scientific data.

- **NET CHART:**

Feature: The data is displayed as points that are connected by some lines in a grid that looks like a spider's net. It plots the data of each row in a separate radial. Application: Used to analyze records of multiple series.

- **STOCK CHART:**

Feature: It uses lines with markers (with height corresponding to the

value being depicted) to show the data series. Application: Used to analyze the stock market movement.

- **BUBBLE CHART:**
Feature: A variation of scatter chart in which data points are represented by bubbles. It can show relations of three variables in two dimensions.
Application: It is used to present financial data.
- **COLUMN AND LINE CHART:**
Feature: A combination of line and column chart.
Application: Used to display data trends and at the same time compare them.

CHECK YOURSELF

- Q1. Spreadsheet is used for:
- Managing financial and accounting documents.
 - Creating data reports.
 - Data analysis
 - All of the above.
- Q2. _____ contains the menus with commands for various tasks.
- Status bar
 - Standard Tool bar
 - Formatting Tool bar
 - Menu bar
- Q3. Columns are _____ in the table.
- Horizontal
 - Vertical
 - Diagonal
 - None of the above
- Q4. The intersection of a row and column is called _____.
- Cell Address
 - Cell
 - Point of intersection
 - None of the above

Q5. Any expressions that begins with an equals '=' is treated as _____.

- Function
- Formula
- Both of the above
- None of the above

STRETCH YOURSELF

- In a Calc worksheet containing price and quantity of various fruits and vegetables in a super mart, write the steps to sort the data in descending order of cost. Also apply filters to price and quantity columns.
- Create a list of names of your family members and friends. Write steps to sort the list alphabetically?
- What are the different kinds of charts available in Calc worksheet?

ANSWERS

Answers to Check Yourself:

- D
- D
- B
- B
- A