Greeting!

## UNIT II - Office Automation Tools

## Chapter 07: Working with OpenOffice Calc

### Status bar:

Below the sheet tabs and horizontal scrolling bar is the “Status Bar”. It shows the current status of the worksheet

### Sheets count:

Displays current serial number of the sheet / total number of sheets available.

### Page Style:

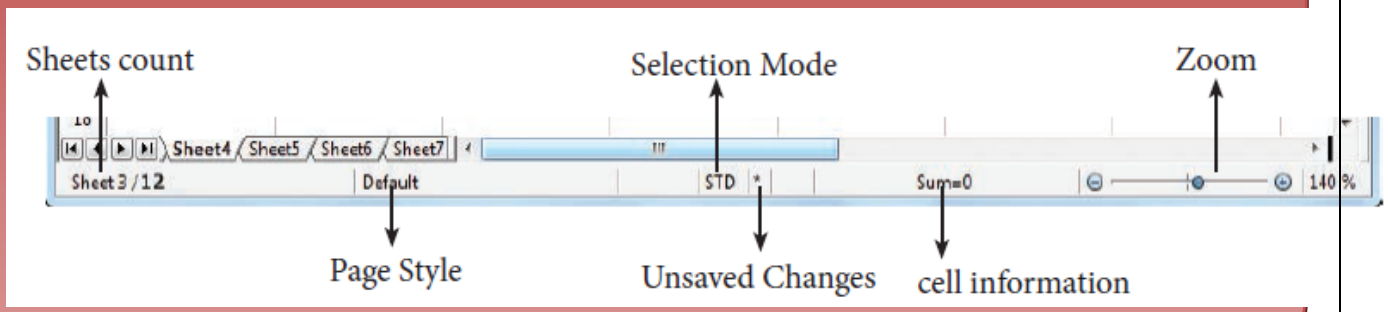
Displays the page style of the current sheet. To make changes, just double-click on “Default” and it will show you the “Page Style” dialog box, which is used to change the margin, orientation, paper size, inserting header, footer, border style etc.,

### Selection Mode:

Displays the selection mode of the current sheet. There are three modes available to select the cells of a worksheet. They are, Standard (STD), Extend (EXT) and Add (ADD).

### Unsaved Changes:

An asterisk ( * ) symbol indicates the changes made in the worksheet but not yet saved. If you have saved your changes, it will disappear.



**Working with Data**

- When you open a new spreadsheet, the cell pointer is located in cell A1. So, the Cell A1 is known as **"Home Cell".**
- **"Tab key"** is used to move the cell pointer towards the right side or forward direction.
- **"Shift+Tab"** is used to move backward i.e. from right to left in a row.
- **"Enter" key** is also used to move the cell pointer.

**Entering Data:**

- Any data can be typed directly in any cell of the worksheet. But, the cell in which you type data should be an active cell.
- So, move the cell pointer to a particular cell to make it active cell; or click any cell to make it active cell.
- Then, start typing any data. When you type data, spreadsheet recognises the type of data entered in cells.

**Data types:**

Data are in different types. Data are made up of alphabets, numbers, Date and time is another data type even though it has numbers and symbols.

**Alphabetic data type:** Consists of alphabets only

**Numeric data type:** Consists only of numbers (whole number or fractional numbers)

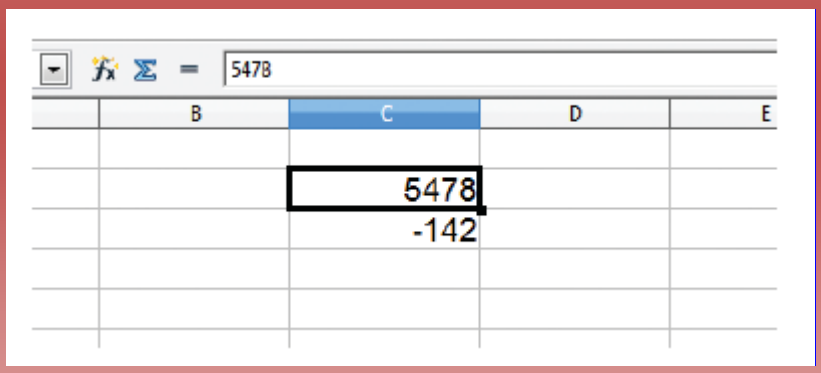
**Alphanumeric data types:** **C**onsists of a combination of alphabets and numerals

**Date data type:** Consists only of date

**Time data type:** Consists only time

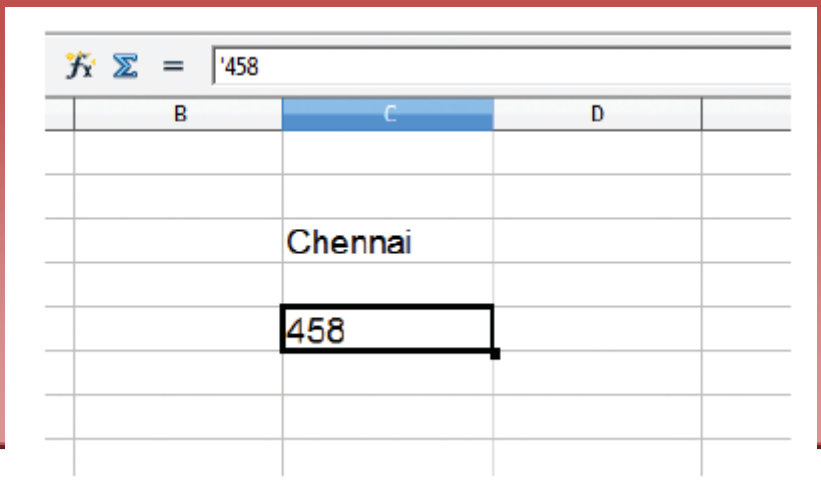
## Entering Numbers:

- Any numeric data can be entered in a spreadsheet. Entered numbers are aligned to the right side within the cell by default.
- Negative numbers may be entered with a minus sign or within brackets.
- If any number starts with 0 (zero); Calc will drop the leading zero.



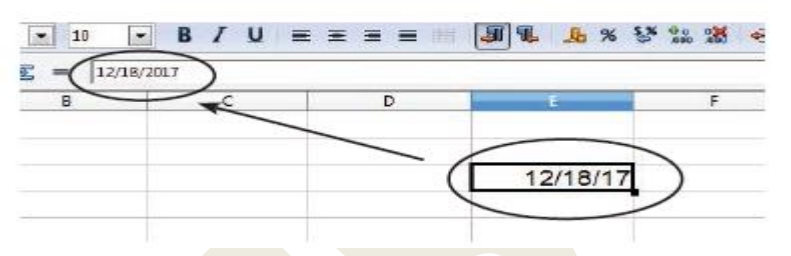

## Entering Text:

- Unlike numbers, any character can be entered as data in Calc. Entered text will be aligned to the left side within the cell by default.
- When you enter any numeric value, if it has aligned left, it is understood that the entered content is not a number.
- If there is any number that starts with a single quote, calc converts that number to text.



## Entering Date and Time:

- Before entering date, ensure the format of your system date. Calc accepts date as per the system date format.
- If your system has American date format i.e. month-date-year; you should enter dates in Calc spreadsheet as mm/dd/yy.
- If your system follows the Indian date format, date should be entered as dd/mm/yy form in Calc.
- Only the correct form of date is accepted by Calc as a date.
- A Date format can be changed to any other valid form using “Cell Formatting” dialog box, and it will be discussed later.




## Different Date Formats:

| Order styles | Countries |
|---|---|
| DD/MM/YYYY | Asia (Central, SE, West), Australia, New Zealand, parts of Europe, Latin America, North Africa, India, Indonesia, Bangladesh and Russia |
| YYYY/MM/DD | Bhutan, Canada, China, Koreas, Taiwan, Hungary, Iran, Japan, Lithuania, Mongolia. |
| MM/DD/YYYY | United States, Federated States of Micronesia, Marshall Islands |
| DD/MM/YYYY and MM/DD/YYYY | Malaysia, Nigeria, Philippines, Saudi Arabia, Somalia |
| DD/MM/YYYY and YYYY/MM/DD | Afghanistan, Albania, Austria, Czech Republic, Germany, Kenya, Macau, Maldives, Montenegro, Namibia, Nepal, Singapore, South Africa, Sri Lanka, Sweden. |

## Creating Formulae:

After entering the data in worksheet, you can perform calculations on the data in the worksheet.

In Calc, you can enter formulas in two methods, either directly into the cell or at the input line. Formula in Calc may start with equal (=) or plus(+) or minus(–) sign followed by a combination of values, operators and cell references. But, as a general practice, all formulas should start with an equal sign. If any formula starts with a + or –, the values will be considered as positive or negative respectively.

## Operators:

Operators are symbols for doing some mathematical, statistical and logical calculations. Combination of values, operators and cell references is called as "Expression". Calc supports a variety of operators which are categorized as:

(1) Arithmetic Operators
(2) Relational Operators
(3) Reference Operators
(4) Text Operator

## Arithmetic Operators :

Arithmetic operators are symbols for performing simple arithmetic operations such as addition, subtraction, multiplication, division etc., These operators return a numerical result.

## Relational Operators:

- Relational operators are symbols used for comparing two values such as greater than, less than, equal to etc.
- The relational operators are also called as ***"Comparative operators".*** These operators return either a True or a False

### Reference Operator:

Reference operators are used to refer cell ranges. **A continuous group of cells is called as "Range".**

### Range Reference Operator:

Colon (:) is the range reference operator. It is used to group a range of cells.

### Reference left :

Reference left is the starting cell address of a linear group of cells or upper left corner address of a rectangular group.

### Reference right:

Reference right is the last cell address of a linear group or lower right corner address of a rectangular group of cell.

### Example:

Linear group of cells A1, A2,A3,A4,A5 is referred as A1:A5

### Reference concatenation operator:

Concatenation means joining together. Tilde (~) symbol is used as a concatenation operator in calc. An expression using a concatenation operator has the following syntax:

**reference left ~ reference right**

### Example:

If you want to find the sum of the values from A1 to A6 and C3 to F3.

The formula is **=SUM(A1:A6 ~ C3:F3)**

SUM is a function to find the sum of a group of values.

## Intersection Operator:

Intersection operator is used to join two set of groups. It is very similar to Range concatenation operator. The intersection operator is represented by an exclamation

***reference left ! reference right***

**Example:** (A2:D3 ! B2:E4)

Range - 1 A2 : D3 Range 2 B2:E4

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | A1 | B1 | C1 | D1 | E1 | F1 |
| 2 | A2 | B2 | C2 | D2 | E2 | F2 |
| 3 | A3 | B3 | C3 | D3 | E3 | F3 |
| 4 | A4 | B4 | C4 | D4 | E4 | F4 |

Intersection of Range 1 and Range 2 B2:D3