Unit 4: Electronic Spreadsheet Using LibreOffice Calc
Chapter 2: Applying Formula and Function in Spreadsheet

1. Different Types of Data in Spreadsheet

1. **Text Data (Label)**
   - Any data that starts with a letter or is not used in calculation.
   - Example: Name, City, Product.
2. **Numeric Data (Value)**
   - Numbers used for calculations.
   - Example: 100, 5000.75.
3. **Date and Time**
   - Used to enter date and time values. Calc can perform operations with date/time.
   - Example: 12/05/2025, 10:30 AM.
4. **Formula**
   - A combination of cell addresses, operators, and values to perform calculations.
   - Example: =A1 + B1, =SUM(A1:A5)

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2. Entering Data in a Sheet

Steps:

1. Open LibreOffice Calc.
2. Click on a cell where you want to enter data.
3. Type the data (text, number, date, or formula).
4. Press **Enter** to confirm.

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3. Formula in Spreadsheet

3.1 Formula with Cell Address

- Example: =A1 + B1 → Adds values of cell A1 and B1.

3.2 Formula with Cell Name

- You can name a cell range and use that name in formulas.
- Example: =Total_Price + Tax_Amount
  (Here, Total_Price and Tax_Amount are named cells)

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4. Editing Contents in Spreadsheet

4.1 Modifying Cell Content

- Double-click the cell or press F2 to edit content.
- Press Enter to save changes.

4.2 Other Editing Options:

- **Insert Cell**: Right-click cell → Insert.
- **Delete Cell**: Right-click → Delete Cells.
- **Cut/Copy**: Select → Right-click → Cut/Copy → Paste.
- **Insert/Delete Row or Column**:
  Right-click on row/column number or letter → Choose insert/delete.
- **Undo/Redo**:
  - **Undo**: Ctrl + Z
  - **Redo**: Ctrl + Y

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5. Mathematical Operators

Operator	Description	Example
+	Addition	=A1 + A2
-	Subtraction	=B1 - B2
*	Multiplication	=C1 * C2
/	Division	=D1 / D2

^	Exponent	=E1^2 (E1 squared)

5.1 Simple Calculation

Example: =50 + 10 * 2

5.2 Using Brackets

Example: =(50 + 10) * 2

Brackets change the order of operation (BODMAS rule).

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6. Functions in Calc

Functions are predefined formulas that perform specific calculations.

6.1 Mathematical Functions

Function	Description	Example
SUM()	Adds values	=SUM(A1:A5)
ROUND()	Rounds value to specified decimals	=ROUND(A1, 2)
INT()	Rounds down to nearest integer	=INT(5.7)

6.2 Date and Time Functions

Function	Description	Example
TODAY()	Returns current date	=TODAY()
NOW()	Returns date and time	=NOW()
DAY()	Day from date	=DAY(A1)
MONTH()	Month from date	=MONTH(A1)
YEAR()	Year from date	=YEAR(A1)

6.3 Statistical Functions

Function	Description	Example
AVERAGE()	Calculates mean	=AVERAGE(A1:A5)
MAX()	Returns highest value	=MAX(A1:A5)
MIN()	Returns lowest value	=MIN(A1:A5)

6.4 Logical Functions

Function	Description	Example
IF()	Returns value based on condition	=IF(A1>50, "Pass", "Fail")

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7. Entering Function in a Cell

Steps:

1. Click the desired cell.
2. Type = followed by the function.
   Example: =SUM(A1:A5)
3. Press **Enter**.

OR

1. Click on **Function Wizard (fx)** button on the formula bar.
2. Choose a category (e.g., Mathematical, Statistical).
3. Select the desired function.
4. Enter arguments and click **OK**.

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8. Common Errors in Formulas

Error	Meaning
#DIV/0!	Division by zero
#VALUE!	Wrong type of argument or operand
#REF!	Invalid cell reference
#NAME?	Unknown function or text used
Err:502	Argument error (e.g., missing value)