ICT LAB ASSESMENT 6

# Spreadsheet:

A spreadsheet is a digital tool used to organize, store, and analyze data in a grid format consisting of rows and columns. Each cell in the grid can hold text, numbers, or formulas. Spreadsheets are commonly used for calculations, budgeting, data tracking, and visualization. They support functions for performing mathematical, statistical, and logical operations on data. Popular spreadsheet software includes Microsoft Excel, Google Sheets, and Apple Numbers, each offering features like chart creation, data filtering, sorting, and conditional formatting to assist with data analysis and reporting.

# Microsoft Excel:

In last lab session, we learn the basics of spreadsheet. Here I’ll explain them, the software I’ll use is Microsoft excel.

## Add data:

First we leant how to add and organize data within seconds using Microsoft excel. We can use tables, charts, graphs etc to organize data using the excel software.

## Automatic data filling:

Rather than fill the data manually, We can just fill 2 to 3 columns with the data and then drag the cursor on the bottom right of the filled cell. A plus(+) sign will appear, click on this and bring it down until you need to fill the data and it will automatically fill the data and the selected cells.

## Formulas:

We can use different formulas to easily calculate and get the desired output. It also helps us to fill the data more effectively. It minimizes the chances of error.  
There are different formulas provided by Microsoft excel like sum, subtract, divide, multiply, average etc.

## Conditional statements:

In Excel, conditional statements are primarily used with the `IF` function and other logical functions to create rules and perform actions based on specific criteria. Here are some examples:

1. **IF Function:** The `IF` function checks a condition and returns one value if true and another if false.

- Example: `=IF(A1>10, "Yes", "No")` (If A1 is greater than 10, it returns "Yes"; otherwise, "No").

2. **AND/OR Functions:** Use with `IF` to combine multiple conditions.

- Example: `=IF(AND(A1>10, B1<5), "Yes", "No")`.

3. **Nested IFs:** To handle multiple conditions, you can nest `IF` statements.

- Example: `=IF(A1>10, "High", IF(A1>5, "Medium", "Low"))`.

4. **IFS Function:** Similar to nested `IF`, but simpler for multiple conditions.

- Example: `=IFS(A1>10, "High", A1>5, "Medium", TRUE, "Low")`.

5. **Conditional Formatting:** Automatically format cells based on conditions without needing formulas.

These statements make it easier to analyze data and automate decisions in Excel.