

# DATA PROCESSING

## SPREADSHEET

*Spreadsheet* program in computer science is an application program commonly used for budgets, forecasting and other finance-related task. In a spreadsheet program, data and formulas to calculate those data are entered into ledger-like form to analysis, tracking, planning or for the evaluation of the impact of real or proposed changes.

*Spreadsheet program* uses rows and columns of cells; each cell can hold text or numeric data or formula that uses values in other cell to calculate a desired result.

### Examples of Spreadsheet

Quattro pro.

Lotus 1, 2, 3

Super Calc 5.0 and higher

Deceasy accounting

Viscall

Multiplan

Frame work

Peachtree

Ms-Excel, etc.

### Uses of Spreadsheet

Computing grades.

Accounting

Forecasting and Predict

Calculating

Financial analysis

Database Management

Charting and graphing

Drawing and graphing

Forms processing and texts layout, etc.

### Practical on Spreadsheet (Ms-Excel)

*Ms-Excel* can be defined as electronic spreadsheet that is designed for analysing and organizing data. It is used for calculating data and accounting purpose.

### Starting Ms-Excel

#### Method 1:

Click start on the menu bar

Point to the programs or all program

Click Microsoft Excel

This will load Ms-excel on the screen.

## Method 2:

Double click Ms-Excel shortcut on the desktop home screen if any.

### Features of Ms-Excel Window

The Excel environment is called workbook. A workbook has three default sheets.

*Worksheet:* This is an environment where data are manipulated. Worksheet is divided into columns and rows. The columns are marked by alphabets while rows are marked by numbers.

### Features of Ms-Excel

Office Button

Title bar

Menu bar

Name bar

Formula bar

### Types of Data in Ms-Excel

**Character Data:** These are entries that are letters, they are not used for calculation.

**Numerical Data:** These are entries that start with numbers i.e 0-9 and may include decimal point.

**Formula Data:** These are mathematical expressions that define the relation among two or more cells in a worksheet or database. The equal to sign (=) is used to begin the formula entry in a cell to distinguish it from the other data types.

### Types of operators in Ms-Excel

Arithmetic/ comparison Operator.

Reference Operator

1. **Arithmetic/ comparison Operator:** This performs basic mathematical operations such as addition, subtraction and division. It combines numbers and produces a numeric result. They are used to calculate two values then, produce the logical value. Examples: +, -, \*, /, %, ^.

- **Reference Operator:** These are used to combine ranges of cells for calculation. Reference operators refer to a cell or group of cells. There are two types of **reference operators**, they are: range and union.

Range (:): example A1: A9.

Union (,) example A1, A2, A3, A4,....., A9.

### Data base Management System (DBMS)

Meaning of Database Management Software: This can be defined as an application package that can be used to create, expand, manipulate and update database information.

**Database Management (DBM):** Database Management can be defined as the entire tasks involved in managing a database. Thus, all the tasks of DBMS are referred to DBM. They include:

Creating Database file.

Modifying the structures of database files.

Organizing Database records (sorting)

Adding new records to database file.

Editing databases files.

Searching records in database files.

Filtering records in database files.  
Printing reports from Database.  
Displaying records in database.  
Deleting records from database

## **Some other Database Concepts**

**Character:** A character is the smallest unit of information that can be stored in a file.

**Field:** A field is a unit of information in a file, it also referred to as database item. It is made up of character.

**Record:** A record is a collection of fields.

**File:** A file is a collection of record about an activity.

**5. Data:** This referred to raw fact and unprocessed information.

**Entity:** This refers to a person, place, thing, event or condition about which information or data are been collected.

**Attribute:** This is a category of data or information that describe an entity.

**9. Record key:** This in a database, refers to a designated filed used to distinguish one record from another.

## **Uses of Microsoft access of database**

- Creating a database.

Saving work

Creating a personal database

Choose database

Exiting and saving.