**Computer Introduction**

**A computer is electronic device**

* Takes the input as raw data device ( facts )
* Processes it into information (meaningful facts), and
* Gives an output

It has ability to store , retrieve and process data.

**Components of Computer system**

* Hardware – The physical componets of computer system which we can touch and feel is Hardware.
* Software –Software is a set of programs which governs smooth operation of the computer system.

A software consists of instructions that tells the hardware how to perform a task.

Do you know:

**Instructions**: these are the commands given to the computer in a language it can understand.

**Program:** A set instructions that tells the computer what to do.

**Remember:**  Both hardware and software are interdependent.

**Types of Hardware:**

**Input** device

**Processing** device

**Storage** device

**Output** device

**Communication** device

**Types of software**

System software- System software controls all the hardware of this machine.

Application software – interacts with us and performs various operations for us. Examp: ATM

**System software**

Software that manages and controls computer hardware is called system software.

**Types of system software**

* **Operating**

**System**

* **Utility**

**System**

**Operating system:**

* It is a system software.
* It is as an interface between the user and the hardware.
* It ensures that computer system is converted to us.
* And all hardware resources( Input and Output Devices ) are used efficiently.

When we switch in the computer system the operating system is loaded from the Hard Disk(Secondary memory) to the primary memory (RAM).

**Do you know:**

Booting: It is the process that starts operating system when we turn on our computer.

**Interface**

A device or software that allows the user to communicate with the computer.

E.G. The touch screen interface of the mobile allows us to interact with mobile apps.

**Function of operating system**

Memory Management – It manages different types of memories of computer, Example : primary memory e.g. Ram/ Rom , Secondary Memory e.g. Hard Disk.

**File Management**

It manages all types of data present in all files and folder. Example : it allows creation, modification storage, and management of files on computers system.

**Application Management**

It allows to run and manage application, software on your computers system.

**Hardware Management**

It coordinates and controls the input and output devices attached with the system. When the system takes the input , it processed and the result is shown to the users through an output device.

**Do You Know**

Version – is the technology up gradation which is different from its previous type.

**e.g. windows 10, windows 8.1**

**Do You Know**

**GUI**

Is a Graphical User Interface. It allows the user to interact with electronic devices through graphical icons, menus etc.

**Single User Operating System :**

Single User Operating system

It allows only a single user to work on a computer system efficiently.

example : WINDOWS OS, MAC OS, MS DOS.

**Multi User Operating System**

It allows two or more users to work on a single computer at same time/different time.

e.g. Unix, A video game in which several players simultaneously.

**(B) Utility Software ( Anti-Virus )**

It helps us to detect, remove virus from our computer system and also prevent our system from being getting infected or attacked by virus.

e.g. Backup utility, Compression Utility, Anti-Virus Software, etc.

**APPLICATION SOFTWARE**

**Applicaion software are a set of programs designed to solve a specific problem or do a specific task. Example,**

**Open Office Writer, Open office Impress, Electricity billing system, Library Management System, Railway Booking System etc.**

**Types of Application Software**

1. General Purpose Software: Anyone can purchase the software, use it but cannot make modification to it. E.g. word-processing software, spreadsheet software, multimedia software
2. Specific Purpose Software : Sometimes organizations need some specific features in the software. So software has to be customized as per their needs or requirements. This type of software is called specific. Example : A chess game, Web browser, Calendar. Calculator.
3. Custom Software: This software is tailor made software. This software is developed to meet all the requirements specified by the user. Example : Software made for Hotel Management, Hospital Mnagement etc.

**SOFTWARE LICENSE**

**Software License**-- is a license agreement on the use and distribution of the software. Software Licensing that defines conditions on the use of software.

**Open Source Software--**  It can be distributed freely and used by everyone free of cost, it is available to the users in order to: a Read, b make changes, c Build new versions of the software.

**Examle :** Openoffice Software, Mozilla Firefox, Android Operating System etc.

**PROPRIETARY SOFTWARE OR CLOSED SOURCE SOFTWARE:**

Proprietary software doesn’t allow people t look at its code or modify it and restrict its distribution. Such software can be freely available or can be purchased.

Example: Microsoft Windows, Microsoft Office, Mac-OS, iOS.

**FREEWARE SOFTWARE**

The Software which is:

1. Made available free of cost to the user
2. It is not necessarily free to be used, copied, modified and redistributed.

Example: Open source software is freeware and some proprietary software are also freeware.

Example: Windows movie makes is proprietary software as well as freeware software.