**Basic Fundamental Concept**

**Basics of computer science tutorial**

Computer science is one of the disciplines of modern science under which, we study about various aspects of compute technologies, their development, and their applications in the present world. Likewise, computer science includes a wide range of topics such as the development of computer technology (hardware and software), application of computer technology in today’s life, information technology, computer threat, computer security, etc. However, we have segregated this tutorial into different chapters for easy understanding.

**What is a computer system?**

A computer is basically a programmable machine capable to perform arithmetic and logical operations automatically and sequentially. It is also known as data processor, as it can store, and retrieve data as per the wish of the user.

*Data processing involves the following three activities*

1-input of data

2-manipulation/processing of data

3- Giving output (i.e. management of output result)

In computer system data are arranged orderly and systematically.

**Major Functions of Computer System**

Following are the core functions of a computer system

* A computer accepts the command and/or data as input given by the user.
* A computer follows the instructions and stores the data given by the user.
* A computer processes the data as per the instructions given by the user.
* A computer gives the desirable results in the form of output.

**Salient Features of Computer System**

***Automation***: the operating system of a computer system is automatic, as no human intervention is required, simply you need to give the command and then it will do the work automatically.

***Speed***: depending upon the power of the computer, it can perform, it can take million instructions per second.

***Storage***: a computer system can store enormous quantity of data in different format. The storage capacity of a computer system is normally expressed in terms of Kilobytes(KB), Megabytes(MB), Gigabytes (GB) or Terabytes (TB).

***Accuracy***: the accuracy of a computer system is very high.

***Versatility***: a computer system is capable of performing a wide range of tasks.

***Diligence***: a computer neither get tired nor lose concentration.

***Reliability***: a computer system always gives accurate result. Therefore, its reliability is very high.

***Vast Memory***: a computer system can have a wide range of memory which can recall the result data at any point of time.

**Role of computer system**

In today’s world, for almost every activity whether personal for example, operating personal savings bank account, or business related for instance, selling any product or services, in some or the other way, we rely on the computer system.

* ***Advantages of computers in business***

Following are the major advantages of introducing computer system in business:

Independency Cost Cutting Marketing

Huge Transaction Capacity huge storage Capacity

Improvement of Productivity and Efficiency High Accuracy

Competition Enhanced the Security System.