

## Introduction

The term Computer is derived from 'compute' which means 'to calculate'.

The term *computer* is derived from the Latin term 'computare', this means to calculate or programmable machine.

The word "computer" was first used in 1613 in the book "*The Yong Mans Gleanings*" by Richard Braithwaite and originally described a human who performed calculations or computations.

A computer is also called a data processor because it can store, process, and retrieve data whenever desired

## Definition

Computer is an electronic data processing device which

1. accepts and stores data input,
2. processes the data input, and
3. generates the output in a required format

Computer is an advanced electronic device that takes raw data as input from the user and processes the data under the control of set of instructions (called program) and gives the result (output) and saves output for the future use. It can process both numerical and non-numerical (arithmetic and logical) calculations.

## Advantages

Following list demonstrates the advantages of computers in today's arena.

### 1) High Speed

- Computer is a very fast device.
- It is capable of performing calculation of very large amount of data.
- The computer has units of speed in microsecond, nanosecond, and even the picosecond.
- It can perform millions of calculations in a few seconds as compared to man who will spend many months for doing the same task.

### 2) Accuracy

- In addition to being very fast, computers are very accurate.
- The calculations are 100% error free.
- Computers perform all jobs with 100% accuracy provided that correct input has been given.

### 3) Storage Capability

- Memory is a very important characteristic of computers.
- A computer has much more storage capacity than human beings.
- It can store large amount of data.
- It can store any type of data such as images, videos, text, audio and many others.

### 4) Diligence

- Unlike human beings, a computer is free from monotony, tiredness and lack of concentration.
- It can work continuously without any error and boredom.
- It can do repeated work with same speed and accuracy.

## 5) Versatility

- A computer is a very versatile machine.
- A computer is very flexible in performing the jobs to be done.
- This machine can be used to solve the problems related to various fields.
- At one instance, it may be solving a complex scientific problem and the very next moment it may be playing a card game.

## 6) Reliability

- A computer is a reliable machine.
- Modern electronic components have long lives.
- Computers are designed to make maintenance easy.

## 7) Automation

- Computer is an automatic machine.
- Automation means ability to perform the given task automatically.
- Once a program is given to computer i.e., stored in computer memory, the program and instruction can control the program execution without human interaction.

## 8) Reduction in Paper Work

- The use of computers for data processing in an organization leads to reduction in paper work and results in speeding up a process.
- As data in electronic files can be retrieved as and when required, the problem of maintenance of large number of paper files gets reduced.

## 9) Reduction in Cost

Though the initial investment for installing a computer is high but it substantially reduces the cost of each of its transaction.

## Disadvantages

Following list demonstrates the disadvantages of computers in today's arena

### 1) No I.Q

- A computer is a machine that has no intelligence to perform any task.
- Each instruction has to be given to computer.
- A computer cannot take any decision on its own.

### 2) Dependency

It functions as per a user's instruction, so it is fully dependent on human being

### 3) Environment

The operating environment of computer should be dust free and suitable.

### 4) No Feeling

- Computers have no feelings or emotions.
- It cannot make judgement based on feeling, taste, experience, and knowledge unlike a human being.