Computer fundamental

# What is computer?

Computer is an electronic device that takes input process it and give output. Laptop/computer is a general purpose computer.

E.g.- play game, watch movies, songs, programming etc. we can do these type of work in general purpose compute.

# Difference b/w Electronic and Electrical Devices.

|  |  |
| --- | --- |
| Electronic | Electrical |
| 1. Electronic device works on low power. it means electronic device has low amount of current. | 1. Electrical device works on high power .it means electrical device has high amount of current. |
| 2. computer, mobile, camera, watch etc. these are electronic device. | 2. Fan, light, TV etc. these are electrical device. |

# What is RAM ?

RAM, which stand for Random Access memory. It is hard-ware device generally located on the mother board of a computer and act as an internal memory of the CPU. It allow CPU store data, program and program result. when you switch on the computer. it is the read and write of a computer. Which means The information can be written to it as well as read from it. RAM is a volatile memory. Which means it does not store data or information permanently.

1. 1KB (Kilobyte) = 1024 Bytes.
2. 1KB (Kilobyte) = 8,192 Bits.
3. 1 MB (Megabyte) = 1024 KB.
4. 1GB (Gigabyte) = 1024 MB. //you have 4gb RAM’
5. 1TB (Terabyte) = 1024 GB. How many bits store in you 4gb RAM.
6. 1PB (Petabyte) = 1024 TB. 4\*1024mb\*1024kb\*1024bytes\*8bits
7. 1EB (Exabyte) = 1024 PB. =34359738368 bits
8. 1ZB (Zettabyte) = 1024 EB.
9. 1 byte = 8 bits.

# What is volatile?

It means data is automatically erase. when the power supply is off .

E.g.- Processor, RAM etc.

# What is non-volatile?

It means that the data is available. When the power supply is off.

E.g. -memory, pen drive etc.

# What is hard-ware?

Hard-ware is a comprehensive term for all the physical parts of a computer as

Distinguished from the data is contain or operates on and the s/w that provides

instruction for the hard-ware to accomplish takes. Hard-ware is anything which is tangible.

# What is instruction?

Instruction is an commend given to a computer processor by a computer program.

size of 1 instruction is 16 bit.

# Hard-ware is two type.

1. Out-side hard-ware.

Mouse, keyboard, Scanner, Monitor, pointer etc.

2. Inner-side hard-ware

Hard-disk, RAM, Lane, card, Processor etc.

# What is a File?

In a simple word we can say that file is a collection of data or data bundle.

Or File is a same type of information of a collection.

File Name File extension exe file is a s/w

\ / \

Track01.mp3 DSCI.JPG List.txt sum.exe

010101010101010101010101010101010101

010101010101010101010101010101

01010101010101010101010101010101010

01010101010101010101010101010101010

We can find which type of contain in this file through the extension.

# What is software?

Software is a collection of instructions and data that tell a computer how to work.

Tow type of s/w

1. Application S/W = Application software is used by the user to perform specific tasks.

The user may choose the appropriate application s/w for performing

a specific tasks.

1. System S/W. = System s/w provides the basic functions that are performed by the

Computer.

# What is process?

Active state of a program is called process.

# What is programming?

Computer programming is a medium for us to communicate with computer. Just like we

‘Hindi’ Or ‘English’ to communicate with each other, program is a way for us to deliver

our instructions to the computer.

# What is Operating System?

It is a system software . example are DOS o/s, Window XP, Window Vista, window8,window10 ,

window11, Solaris, Macintosh, Linux etc. It provide interface between user and machine. Acts

as a manager of the computer system. it dose process management, memory management

and File management.

#What is Data-Base?

Data-Base is a collection of data. where we store the data.

#What is Data-Base Management System?

DBMS is a s/w which is used to manage it collection of data.

#What is data?

Any type of information is called data.

E.g. – name, address, contacts-list etc.

# Top DBMS.

Oracle, MYSQL, Postgre Sql, M/S SQL Server etc.

# What is Core?

A core is a part of CPU that receive instructions and perform Calculation or action based on

these instructions.

#Type of core?

\*Single core \*Octa core \*Core i5

\*Dual core \*Deca core \*Core i7

\*Quad core \*Core i3

#What is device driver?

A device driver is a computer program that operate or control a particular device i.e. attached to a computer. It is a hard-ware .