

ASSIGNMENT - 01

Ques 1) What are the four fundamental parts of computer? Explain it with the help of diagram?

Ans - The four fundamental parts of computer are:-

- i) Central processor unit
- ii) Memory (RAM) also known as volatile memory.
- iii) Input [Keyboard, Mouse, etc]
- iv) Output [Monitor, Printer, etc]

Ques 2) Discuss about the classification of computer based on size and capacity?

Ans - On the basis of size there are four types of computer:-

- i) Mini Computer :- A mini computer is a medium sized computer more powerful than micro-computer.
Example :- Digital Alpha, Sun ultra.

ii) Micro Computer :- A micro computer is the smallest general purpose processing systems.

Example :- Apple Computer, Pcs, Notebooks, etc.

It is 2 types :-

a) Desktops

b) Portables

iii) Mainframe Computer :- Computer with large storage capacities and very high speed of processing.

Example :- IBM 370, S1390.

iv) Super Computer :- Super computer have extremely large storage capacity and computer speeds which are many times faster than other computer.

Example :- IBM, Deep, Blue.

(Que 3) What is meaning of computer generation?
How many computer generations are defined? what technologies were/are used?

Ans - History of computer can be considered frame wise of human culture as person known as calculation.
Roman's abacus is first device used in BC for calculation. The electronic numerical integrator and calculator [ENIAC] first general purpose, digital electronic calculator.

Generation of computer :-

First generation :- It had been used vacuum tube technology make possible to do calculation.

- (ii) Second Generation $\div$ It had been used transistors which made a computer a little concise and faster to do the same.
- (iii) Generation Fourth $\div$ It had been used Microprocessors inside to work for better comparatively.
- (iv) Third Generation $\div$ It had been used for Integrated circuits, faster, comparatively reliable as well.
- (v) Fifth Generation $\div$ Computer are assigned Automatic intelligence. They use Artificial intelligence.

Q.4 Differentiate between Volatile and non-volatile memories?

Ans

<u>Volatile Memory</u>	<u>Non-Volatile Memory</u>
i) Data is present till power supply is present.	Data remain supply even after power supply is not present.
ii) Volatile memory data is not permanent.	Is permanent.
iii) Faster the Non-Volatile memory.	Memory access is slower.
iv) Data transfer is easy.	Data transfer is difficult HDD
v) Less storage capacity.	has very high storage capacity.

Q.5 Distinguish among system software, application software, open source on the basis of their features?

Ans System software

- i) Maintain the system resources and give the path for application software to run.
- ii) High level language are used to write.
- iii) It's a general purpose software.
- iv) Without system software system can't run.

Example :- Operating system etc.

Application Software

- i) It is built for specific task.

ii) High level language are used to write.

iii) Specific purpose software.

iv) Unlike without application software system always run.

Example :- VLC players
photoshop etc.

Question-16 What is the difference between Machine language and high level language?

Ans

Machine language or machine code, consists of binary code and is the only language that is directly understood by the computer. Both machine code and assembly language are hardware specific.

A high level language is a programming language that uses english and Mathematical symbols in the instructions.

High level language such as C++ must be compiled into machine language before the code is run as on a computer.

Ques. 19 Describe the syntax of the following statements.

- i) If-else-statement :- If the statement can be followed by an optional else statement which executes when the logical expression is false. The syntax of an if...else statement in C programming language is if (expression)

{ Block of statements;

} else

{ Block of statements;

}

The above syntax can be represented in the form of a shown below you can understand the concept of conditional statements in the C programming with following programme.

For example, find the largest of two numbers, if the numbers are $a = 30$ and $b = 50$

```
#include <stdio.h>
int main () {
    int a = 30, b = 50;
    if (a > b) {
        printf ("largest number is %d\n", a);
    } else {
        printf ("longest number is %d\n", b);
    }
}
```

When the above program is executed, it produces the following result -
longest number is 50

- b) For loop ÷ For loop is similar to while, it's just written differently. For statements are often used to process list such as a range of number.

Basic syntax of the for loop is as following ÷

For (expression 1; expression 2; expression 3) {

Single statement
or

Block of statements ;

{

In the above syntax ;

- Expression 1 - Initializes Variables.
- Expression 2 - Conditional expression, as long as this conditional is true : loop will keep executing.
- Expression 3 - Expression 3 is the modifier which may be simple increment of variable.

iii) while loop :- The most basic loop in C is the while loop. A while loop statement is like a repeating if statement, like an if statement, if the test conditional is true. The statement gets executed. The difference is that after the statement has been executed, the test condition is checked again. If it is still true the statement gets executed again. The cycle repeats until the test condition evaluates to false.

Basic syntax of while loop is as follows while (expression)

{

Single statement

or

Block of statement

}

iv) do-while loop ÷ do-while loop is just like a while loop is except that the test conditional is checked at the end of the loop rather than the start. This has the effect that the content of the loop are always executed at least once.

Basic syntax of do ... while loop is as follows.

```
do  
{  
    single statement  
    or  
    Block of statement  
} while (expression);
```

understand

You can understand the concept of the various loops by execution by execution of the following programming.

using

using while loop

Using do -
while loop#include <stdio.h>
int main ()#include <stdio.h>
int main ()#include <stdio.h>
int main (){
int i;{
int i = 0;{
int i = 0;for (i = 0; i < 5; i++)
{
printf ("Hello ");

printf ("Hello ");

printf ("%d\n", i);
}printf ("%d\n", i);
i = i + 1;

}

}
}while (i < 5);
}

Output

Hello 0

Hello 1

Hello 2

Hello 3

Hello 4

Output

Hello 0

Hello 1

Hello 2

Hello 3

Hello 4

Output

Hello 0

Hello 1

Hello 2

Hello 3

Hello 4