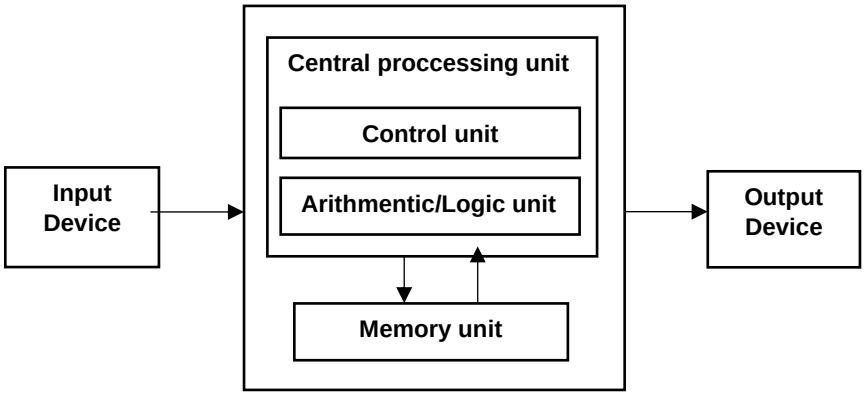
CCA-101: Fundamentals of IT & programming

Assignment-1

Q)1.Ans: Four fundamental parts of computer

- Input device
- Central processing unit
- Output device
- Memory unit



Q)2. Ans: Classification of computer

- Super computers,
- Minframe computer,
- Mini computers,
- Micro computers.

Super computers

Super computers are the most powerful and physically the largest by *size.*

Minframe computer

Maniframe computers are very large often filling an entire room and can process thousands of millions of instruction per second.

Mini computer

Minicomputers are much smaller than maniframes.

Micro computer

Microcomputers are the most frequently used type of computer.

Q)3. Ans: Computer generation

- First generation
- Second generation
- Third generation
- Fourth generation
- Fifth generation

➔ **First generation**

The first computer system used vaccm tube for circuitry and magnetic drums for memory, and and were often enrmous taking up entire rooms. UNIVAC (Universal automatic computer) and ENIAC

(Eletronic numerical integrator and computer) U.S. Census Bureau in 1951

➔ **Second generation**

Tranistors replace vaccm tubes in the Second generation of computer bell labs until the late 1950s. in 1947.

➔ **Third generation**

The devolopment of the integrated circuit was the hallmark of Third generation of computer 1964

➔ **Fourth generation**

The microprocesser brought the fourth generation of computer 1971

➔ **Fifth generation**

Fifth generation computing devices, based on artificial intellingence, present and beyond

Q)4. Ans:Volatile and non volatile

s.no	Ram	Rom
1	Temporary storeage	Permanent Storage
2	Store data in MBs	Store date in GBs
3	Volatile	Non- volatile
4	Used in normal	Used for startup process of computer
5	Writing date is faster	Writing data is slower

Q)5. Ans: Software

Types of S/W:

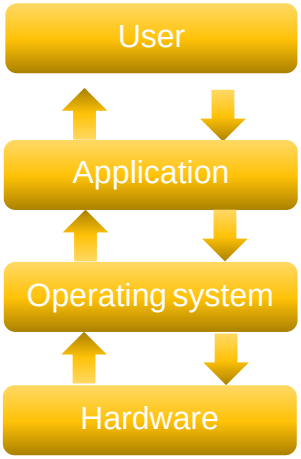
The software is used extensively for different purpose in several domanins.

☐ **System software:**

It is a type of software that is designed to run a computer's hardware and appication programs. Software like operating system, compilers, editors and drivers etc.,

☐ **Operating system (OS):**

Operation system acts as manager of all the resources of computer, i.e. resources manager. Hardware and Software resources and provides services.



Q)6.b) write steps regarding following:

The evaluation of digital computing is often divided into generations. Each generation is characterized by dramatic improvements over the pervious generaton in technology used to build computers, in terms of the internal organisation of computer and programming languages.

Q)7. MS Word:

- Creating,
- **Editing,**
- Saving, ~~and~~
- **Printing any type of document**

Q)8. 'Equations'

EQUATIONS

$X_2 + Y_5 = 30$

$Z^3 + Q^4 = 50$

$A_2 + B^8 = X_2 + Y^8$

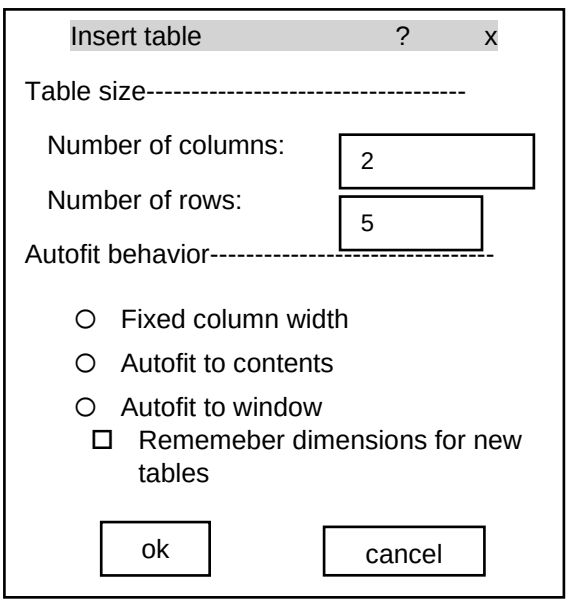
Q)9.'text-to-table'

Select the text you want to convert.
Select the **Insert** tab.
Click on **Table** command. A dialog box appears.
Click on **convert text to table, a new** dialog box appears.
Here set number of columns.
Click on ok finally selected text convert in a table.

⇩

Select the text you want to convert.	Select the **Insert** tab.
Click on **Table** command. A dialog box appears.	Click on **convert text to table, a new** dialog box appears.
Here set number of columns.	Click on ok finally selected text convert in a table.

Q)10 MS-WORD to insert a table in the document:



Q)16) Machine language and high level language:

Machine language:

A computer programming language consisting of binary instruction which a computer can respond to directly.

Sometimes it is refrred to as machine code or object code, machine language is a collection of binary digits pr bits that the computer reads and interperts.

A computer understand the peogrammimg language used to create computer programms.

Example: 01001000,01100101,0110110,01101100 ect…..

High- level language:

A high- level language is any programming language that enables devlopment of a program in a much more user-friendly programming context.

This language is a programming language with strong abstraction about the detail of the computer in contract to low- level programming language

Example: c,cc++, java

Q)17) C programming language:

A programming language is a vocabulary and set of grammatical rules for instucting a computer or computing device to perform specific tasks. The term programming language usually refers to high- level language, such as , C++, COBOL, java, FORTRAN, A dak and pascal.

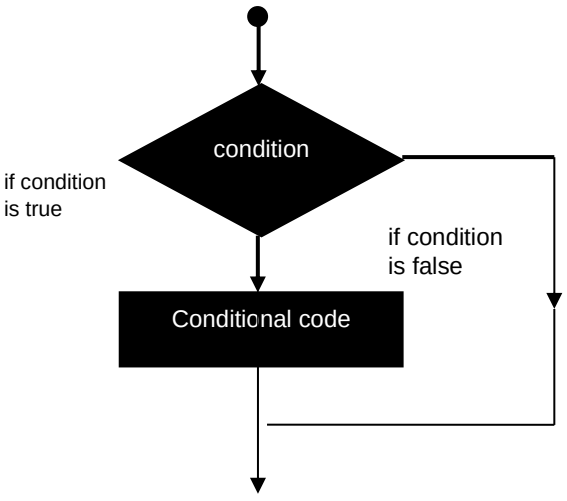
- Machine language
- High- level language

Q)19) syntax the statements:

a) if- else statement:

```
if (expression)
  statement;
or
if (expression)
  {
    Block of statement;
  }
```

Almost all the programming language provide this statement that work based on the following flow diagram-



IF… elsr statement: if statement can be followed can be followed by an potional **else** statement, which executes when the bolean expression is false.

```
if (expression)
 {
  Block of statement;
 }
 Else
{
 Block of statement;
}
```

the above syntex can be responsented in the from of diagram as shown below-

b) for loop:

for loop is similar to while, its just written diffrently. For statement are often used to proccess lists such a range of number;

basic syntax of for loop is as follows:

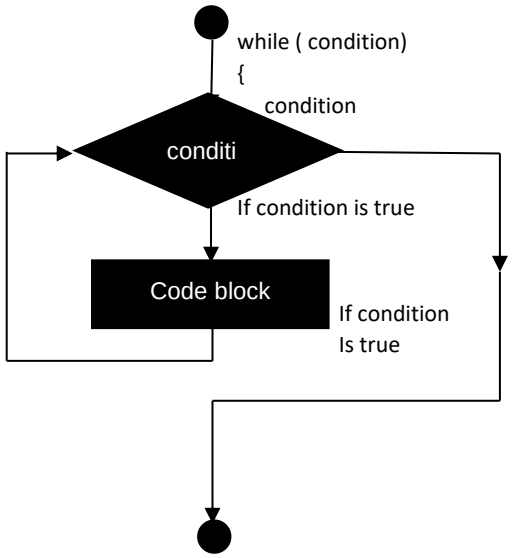
```
for (expression1; expression2;expression3)
{
  Single statement
  Or
  Block of statement;
}
```

c) While loop;

The most basic loop in C is the while loop. A while statement is like repeating if statement. Like an if statement, if the test condition is true.

```
While (expresion)
{
  Single statement
  Or
  Block of statement;
}
```

The above code can be represented in the form of a flow diagram as shoe below-



d) do…while loop;

do… while is just like a while loop expect that the test condition is checked at end of the loop rether then the start.

Basic syntax of do… while loop is as followed:

Do
{
Single statement
Or
Block of statement;
}**while** (expression);
The above code can be represented on the from diagram as show below-