

## Computer Basics

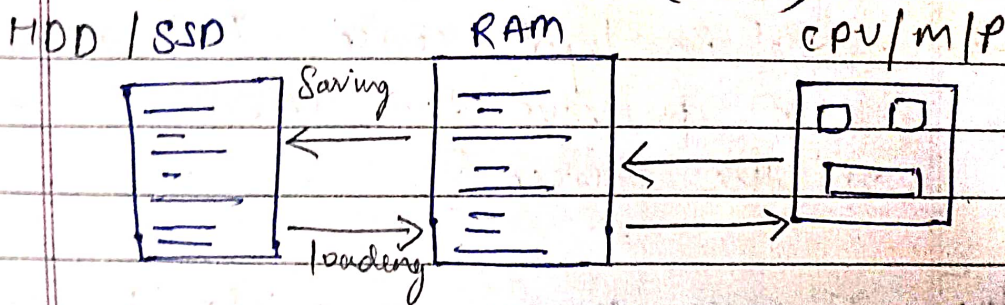
### Assignment - 1

Q-1 What is a computer?

Ans- A computer is a electronically program-mable device, that take some input, process it and give result of input data as an output.

Q-2 What is RAM?

Random Access memory is a volatile memory of computer system, where data is come and go from Solid State Drive (SSD).



Q-3 Where is data stored in a computer?

In a computer data is stored for future use in Hard Disk Drive. Data is send to it by RAM also fetch from RAM.



Q-4 What is that input device used to type text and numbers on a document in the computer system?

Ans- In computer system for input text we use keyboard also some for num-ber.

Q-5 What are the o/p device?

Ans- The o/p devices are one of the unit of computer system, at which we get output for any certain input.

Example- printer, speaker, monitor, projector, headphones, etc.

Q-6 What is input device that allow a user to move the cursor or pointer on the screen?

Ans- To move cursor or pointer in computer screen we use input device, mouse or finger slide on laptop.

Q-7 Which language is directly understood by the computer without a translation program?

Ans- Machine level language (0,1).

Q-8 What are input device?

Ans- Input devices are the one of the unit of computer system through which we give some data and instruction to the CPU or processor to perform on data and to give the output.

Example- Keyboard, mouse, scanner, touchpad, microphone, etc.

## Fundamental of Java

### Assignment-2

Q-1 What is a programming language?

- In computer world a programming language are just a digital language through which we communicate to computer hardware, processor, i/p unit and o/p unit to give any command, any instructions.

- There are many language specially high level language that have some information in english language and in numeric manner.

Example- C, python, Java Script, Java, C++, C#, etc.

Q-2 Why do we need programming language?

We need a programming language for the following purpose-

- (a) To communicate with computer.
- (b) It is very easy to understand by humans.
- (c) To write any program or to develop any software.
- (d) To get a good job in IT industry.

Q-3 What are features of Java?

features of Java are following:-

- (a) Java language is a high level language.
- (b) Java is object oriented programming language.
- (c) Java is platform independent programming language.



Q. Abstraction  
Inheritance  
Encapsulation  
Polymorphism.

Q. Java is highly secure and easy to learn.

Q. Java is a multi-threaded programming language.

Q. Java has high performance.

Q-4 What is a class?

Classes in Java is the set of all properties and method associated to any object or It is a template / Blueprint of object of any real word in the computer system.

Example - class Student {

int age;

String name;

void smile () {

}

Q-5 What is an object?

Q. Objects in real world are everything we are around us (example - boy, girl, car, chair, fan etc.).

Q. In Java objects are simply the digital representation of real-world object.

Q. In Java an object is an instance of a class.

Example -

Student a = new Student();

boy b = new boy();

Dog d = new dog();

Cat c = new cat();

Q-6 Explain the main() method in Java?

Example

```
Static public void main (String [] args) {  
    int age;  
    int height;  
    void hello() {  
        System.out.println("Hello");  
    }  
}
```

② In Java main() methods are the entry point of Java virtual machine control.

③ JVM automatically calls main method.

Java Variable and Data type

Assignme - 3

Q-1. What is statically typed and dynamically typed programming language?

②. Statically typed PL-

Statically typed programming language is a language in which we need to write the data type of any variable during declaring or initializing to tell JVM that 'this' data is of 'this' data type.

Example - C, Java etc

③. Dynamically typed PL-

It is a programming language in which we do not required to write the data type of any data. JVM automatically select the data type and provide it a suitable memory block as per requirement.

Example - python, JavaScript, etc.



Q-2 What is a variable in Java?

① Variable is the name of a ~~name~~ memory block reserved or allocated for any data.

② Data can be call or access by its name throughout the program.

Q-3 How to assign a value in a variable?

In Java To assign a value in a variable, we need to do -

Data type name = value;

①                      ②                      ③

① Data type of value or variable.

② name of variable.

③ value or data assigning in variable.

Q-4 What are primitive data type in Java?

① Primitive data type are those data type which not derived from any other data type.

② Primitive data types are predefined by the developer and are not object.

③ Example - (i) Numeric type -

int (4B), short (2B), byte (1B), long (8B), float (4B), double (8B).

(ii) Character type -  
char (2B)

(iii) Boolean type -  
True (1B), false (1B)

(iv) Null type -  
null.

Q-5. What are the Identifier in Java?

① A Identifier is the name given to a package, class, interface, method or a variable.

② all Identifier must have different name.

③ All Identifier should begin with a letter (A to Z or a to z) or \$ or \_ (under score) and must be unique.

④ It is case sensitive.

Q-6. List the operators in Java?

① Arithmetic operators -

+, -, /, %, \*

② logical & operator -

||, &&, !, &

③ unary operator - (Increment / Decrement operator)

++, --

④ Binary operator - (Bitwise operator)

|, &, ^, ~, <<, >>, >>>

⑤ Assignment operator -

=, +=, -=, \*=, /=, %=.

⑥ Comparison operator -

==, !=, >, <, >=, <=

⑦ Conditional (Ternary) operator.

'condition ? expression 1 : expression 2'

Q-7. Increment / Decrement operator?

Increment -

x = 5;  
x++; { 6 }

Decrement -

x = 5  
x--; { 4 }