

# Fundamentals of Java

## Assignment

1.What is programming language?

Ans. A programming language is a language in which a program is written. A program is a set of instructions given to processor to perform any task. There are three categories of programming languages-

- i. High level language
- ii. Assembly level language
- iii. Machine level language

2.Why do we need a programming language?

Ans. As we know processor is responsible for carrying out any task which needs to be performed but it is just a device so we need to instruct it what needs to be done in the language which processor understands. A program is a set of instructions needed to perform any task and program is written in programming language. So in order to get the required result from the processor we need to write a program in any programming language and compiled to machine level language then it will be executed by processor.

3.What are the features of Java?

Ans. Features of Java are as follows-

- i. Simple
- ii. Robust
- iii. Portable
- iv. Platform Independent
- v. Distributed
- vi. Object-Oriented

4.What is an object?

Ans. An object is a real world entity which has state and behaviour. An object is an instance of class.

5.What is a class?

Ans. A class is a blueprint of an object. It is a collection of objects having similar traits, properties and behaviour.

6.Explain about the main() method in Java.

Ans. A program contains many methods but the execution of the program starts with the main() method. In Java syntax for main method is as follows:

**public static void main(String args[])**

- Here, main is for method name.
- void is used as main method does not contain any return statement.
- static is used to allow invoking main method without creation of object of the class.
- public is used to allow accessing main method outside the class.
- String args[] is used for command line arguments.