# **Assignment-1**

## 1.what is java?

- Java is a programming language and a platform.
- Java is a high level, robust, object-oriented and secure programming language.
- Java is case sensitive programming language.
- Java is released by Sun Microsystems in 1995.

## 2.Explain all the java features in one or two lines?

Simple, Object-Oriented, Portable, Platform independent, Secured, Robust, Architecture neutral, Interpreted, High Performance, Multithreaded, Distributed, Dynamic.

## 3.In which folder can we find the Javac, Java, Javah, Javarmi commands?

- Java is placed in the same directory as Server and RMIInterface.
- By default, javah places the new .h file
- In the same directory as the .class file.
- You can tell javah to place the header files in a different directory with the -d option.

# 4.what all the environment variables to set to run the java programs through command prompt?

 Java-DconfigDir=/etc/myconfig-config/-cptest-tool.jar service.ScriptGenerator \$clinic count \$client files count

## 5.what are the rules of naming the class?

Class names should be nouns, in mixed case with the first letter of each internal word capitalized.

# 6.which is the main entry point of java program?

In Java programs, the point from where the program starts its execution or simply the entry point of Java programs is the main() method.

## 7. Components of java program are?

Module, Package, Class, Variable, Statement, Method, Constructor, Inner class.

## 8.what is JVM,JRE,JDK?

- JDK stands for Java Development Kit. JRE stands for Java Runtime Environment. JVM stands for Java
- Virtual Machine. It is a software development kit that helps in the development of applications in Java.
- Along with JRE, the JDK includes other various development tools.

# 9.Explain the components of compile time environments and run time environments.

- By runtime, we mean a program in execution. Runtime environment is a state of the target machine,
- which may include software libraries, environment variables, etc., to provide services to the processes running in the system

#### 10.what is JIT?

The Just-In-Time (JIT) compiler is a component of the Java Runtime Environment that improves the performance of Java applications at run time.

## 11. Different types of memory in JVM.

Two kinds of memory. The JVM divides its memory into two main categories: heap memory and non-heap memory.

#### 12.In which area .class is stored?

The classes and it's own constant pool, i.e static variables are stored in Method Area.

#### 13.In which area object are stored?

In Java, all objects are dynamically allocated on Heap

### 14. Why do we call as java simple?

Java is very easy to learn, and its syntax is simple, clean and easy to understand.

# 15. Why java is platform independent explain?

Java is platform-independent because it uses a virtual machine. The Java programming language and all APIs are compiled into bytecodes. Bytecodes are effectively platform-independent

# 16.Is JVM platform dependent?

JVM is undoubtedly platform-independent.

# 17.ls java case sensitive?

Java, like most programming languages, is case sensitive. Even the slightest difference in naming indicates different objects (count does not equal Count). In order to be consistent, programmers follow naming conventions. For example, variables are lowercase (car) and classes are uppercase (Car).

# 18.Is java complete object Oriented programming language?

No! Java is not a "PURE" Object Oriented Language, because it uses primitive data types such as (int,float,char...etc).