

# JAVA

## 1. Java Virtual Machine

- JVM stands for Java Virtual Machine which is a run-time environment for the compiled java class files.

## 2. Are JavaScript and Java the same?

- Java is an OOP programming language while Java Script is an OOP scripting language.
- Java creates applications that run in a virtual machine or browser while JavaScript code is run on a browser only.
- Java code needs to be compiled while JavaScript code are all in text.
- They require different plug-ins.

## 3. Java Runtime Environment

- JRE is what we need to run a Java program and contains set of libraries and other files that JVM uses at run time.
- JRE = JVM + Library Classes

## 4. Java Development Kit

- JDK is what we need to compile Java source code and contains JRE, development tools.
- JDK = JRE + Development tools

## 5. What are the popular topics for Java Interview?

Some of the popular topics for Java interview are:

- OOPS Concepts
- Java String
- Collections Framework
- Multithreading
- Generics
- Exception Handling
- Stream API
- Lambda Expressions
- Latest Release Features
- Java EE Frameworks – Spring, Hibernate etc.

## 6. What are the advanced Java Topics?

Some of the popular topics for Java interview are:

- Heap and Stack Memory
- Garbage Collection
- Reflection API
- Thread Deadlock
- Java ClassLoader
- Java Logging API
- Internationalization in Java
- Java Module System

## 7. Which class is the superclass of all classes?

- `java.lang.Object` is the root class for all the java classes, and we don't need to extend it.

## 8. What is the method?

- Collection of statements that are grouped together to perform an operation. When you call the `System.out.println()` method, for example, the system actually executes several statements in order to display a message on the console.
- A method is a set of code which is referred to by name and can be called (invoked) at any point in a program simply by utilizing the method's name. Think of a method as a subprogram that acts on data and often returns a value. Each method has its own name.

## 9. What is the constructor?

- A constructor in Java is a special method that is used to initialize objects. The constructor is called when an object of a class is created.
- Each time an object is created using `new()` keyword at least one constructor (it could be default constructor) is invoked to assign initial values to the data members of the same class.