**Java Interview Questions**

1. What is java?

➳ Java is a programming language and a platform. Java is a high-level, robust, object oriented and secured programming language.

1. Tell me some features of java?

➳ **Simple**: Java is very easy to learn, and its syntax is simple, clean and easy to understand

➳ **Object-oriented**: Java is an object-oriented programming language. Everything in Java is an object. Object-oriented means we organize our software as a combination of different types of objects that incorporate both data and behaviour.

➳ **Platform Independent**: Java is platform independent because it is different from other languages like C, C++, etc. which are compiled into platform specific machines. while Java is a write once, run anywhere language.

➳ **Compile and Interpreted**: Java Language offers both compilation and interpretation of programs. when java program is created the java compiler compiles the source code into byte code. the java interpreter converts java byte code into machine code.

➳ **Secured**: Java is best known for its security. With Java, we can develop virus-free systems. Java is secured because:

* No explicit pointer
* Java Programs run inside a virtual machine sandbox

➳ **Robust**: The English mining of Robust is strong. Java is robust because:

* It uses strong memory management.
* There is a lack of pointers that avoids security problems.

➳ **Portable**: Java is portable because it facilitates you to carry the Java bytecode to any platform. It doesn't require any implementation.

➳ **High-performance**: Java is faster than other traditional interpreted programming languages because Java bytecode is "close" to native code.

➳ **Distributed**: Java is distributed because it facilitates users to create distributed applications in Java.

➳ **Multi-threaded**: A thread is like a separate program, executing concurrently. We can write Java programs that deal with many tasks at once by defining multiple threads.

1. Difference between JDK, JRE, & JVM?

**JVM**:

➳ JVM is an abstract machine. It is called as virtual machine because it does not physically exist.

➳ It is a specification that provides runtime environment.

**JRE**:

➳ JRE is a acronym for java run time environment. It is a set of software tools that is used for developing java applications.

➳ It is used to provide the run time environment.

**JDK**:

➳ JDK is an acronym for java development kit.

➳ the JDK is a software development environment which is used to develop java application & applets.

➳ it contains JRE + development tools.

**JDK**

+ Libraries

JVM

**JRE**

+DevelopmentTools

1. How is My Code Running?
2. **Compilation**:

compiler

Source code.java 🡺 🡺 Byte code. Class

1. **Execution**:

JVM

Byte Code. Class 🡺 🡺 { native code}