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1. Write the difference between JRE, JDK and JVM?

• JRE (Java Runtime Environment):

JRE is an implementation of JVM. It is a type of software package that provides class libraries of Java, JVM, and various other components for running the applications written in Java programming. The JRE is platform-dependent. It converts to Java Source code to byte code.

JDK (Java Development Kit):

JDK is a software development kit that develops applications in Java. Along with JRE, the JDK also consists of various development tools (Java Debugger, Javadoc, compilers, etc.). The JDK is platform-dependent.

• JVM (The Java Virtual Machine):

JVM is a platform-independent abstract machine that has three notions in the form of specifications. This document describes the requirement of JVM implementation. The JVM is platform-independent. It reads the byte code.

2. Write the difference between JSE, JEE and JME?

• **JSE** (Java Standard Edition):

You can develop standalone applications/desktop applications or even write scripts using Selenium tool for Automation Testing.

• **JEE** (Java Enterprise Edition):

It's used to develop rich enterprise web applications.

• **JME** (Java Micro Edition):

Can be used to develop applications running on mobile devices, embedded systems etc.

3. How does java achieve platform independency?

Java achieve platform independency through a virtual machine. JDK has a compiler that converts your Java code to bytecode and bytecode is platform-independent. JVM can read this bytecode and using an interpreter convert them to OS-specific instructions which vary based on OS.

4. What are features of Java and explain them?

• Platform Independent:

As java runs on the principle Write Once and Run Anywhere (WORA). So, it can be executed on multiple platforms, for example, Windows, Linux, Mac/OS, etc. Java code is compiled by the compiler and converted into bytecode. This bytecode is a platform-independent code because it can be run on multiple platforms.

• Secured:

Java is the oldest and most trusted language for the security perspective because with Java we can develop the secure application and provide more security in terms of viruses by using security managers to recognising legal code entry by byte code system.

• Portable:

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

5. Write a Java Application which prints your details?

• Java Application for personal details:

```
public class PersonalDetails{
    public static void main(String[] args){

        System.out.println("Name : Vishal");
        System.out.println("Father's Name : Dattatreya");
        System.out.println("Mother's Name : Aruna");
        System.out.println("Age : 26");
        System.out.println("Gender : Male");
        System.out.println("Address : Somewhere on the earth..!");
        System.out.println("Mobile No. : 9999988888");
    }
}
```