Chapter 1

1. **Write the JDK consists of the component.**

**Answer:** The JDK consist of the component are given below…..

* The Java programming language
* Tools and tools API
* Deployment technologies
* Java Platform, Standard Edition (Java SE) libraries
* Virtual Machine for the Java platform (Java Virtual Machine (JVMTM))

1. **What is the Java Programming Language?**

**Answer:** The Java Programming Language is a general-purpose, concurrent, strongly typed, class-based object-oriented language. The Java programming language is defined by the Java language specification.

1. **What is a JVM implementation?**

**Answer:** A JVM implementation executes Java technology applications, which consist of compiled Java classes. Compiled Java classes consist of byte code, so to be precise, a JVM implementation loads the classes that compose a Java technology application and execute s the byte code contained in the classes.

1. **How do you know about JVM implementations platform dependent?**

**Answer:** JVM implementations are platform specific. For example, to execute a Java application on a Solaris OS, you need the JVM implementation that is specific to the Solaris OS.

1. **How do you know about Java technology applications platform dependent?**

**Answer:** An application written using the Java programming language is platform independent. Such an application can run on any platform that contains a supporting JVM implementation.

1. **What is a Java Hotspot TM virtual machine?**

**Answer:**

1. **What is a Java Hotspot Client VM?**

On platforms typically used for client applications, the JDK software comes with a virtual machine (VM) implementation called the Java Hotspot Client (Client VM). The client VM is turned for reducing start-up time and memory footprint.

1. **What is a Java Hotspot Server VM?**

**Answer:** On all platforms, the JDK software comes with an implementation of the Java virtual machine called the Java Hotspot Server VM (Server VM). The server VM is designed for maximum program execution speed.