

JVM – it is a JRE component. It is an execution engine which creates a platform independent execution environment for executing Java compiled code. It is an imitation of a Java processor on the physical machine.

Bytecode- This is an optimized set of instructions executed by the Java runtime environment.

JRE – this is the software component provided by the Java SE platforms that provides JVM and data libraries that are used to run a Java program.

JDK – it is a binary software kit released by Oracle corporation. It is an implementation of Java and distributed for different platforms such as windows, Linux, macOS etc. It contains a comprehensive set of tools such as compilers and debuggers that are used to develop Java applications. Java JDK includes the necessary development tools, runtime environment and APIs for creating Java programs with the Java platform.

Java compiler – it is a program that takes the text file work of a developer and compiles it into a platform independent Java file.

Maven – it is a build automation tool used primarily for Java projects. It addresses how a software is built and its dependencies. It dynamically downloads Java libraries and maven plug-ins from one or more repositories Such as the maven 2 central repository And stores them in a local cache. The local cache of downloaded artifacts can also be updated with artifacts created by local projects.

Gradle – – it is a build automation tool often used for JVM languages such as Java, groovy, or scala. Gradle can be configured to run tasks which do things like compile jar s, run tests, create documentation and more.

Pom.xml - POM is an acronym for project object model. The pom.xml file contains information of projects and configuration information for them even maven to build the project such as dependencies, build directory, source directory, test source directory, plug-in goals etc