

JDK (Java development kit)

The Java Development Kit (JDK) is a software development environment used for developing Java applications and applets. It includes the Java Runtime Environment (JRE), an interpreter/loader (Java), a compiler (javac), an archiver (jar), a documentation generator (Javadoc) and other tools needed in Java development. In other words, JDK provides the environment to develop and execute(run) the Java program. JDK is a kit which includes two things

1. Development Tools(to provide an environment to develop your java programs)
2. JRE (to execute your java applications and applets).

JRE (Java runtime environment)

The Java Runtime Environment provides the minimum requirements for executing a Java application; it consists of the Java Virtual Machine (JVM), core classes, and supporting files. We can also say that it is an installation package which provides an environment to only run(not develop) the java program(or application)onto your machine. JRE is only used by those who only want to run the Java Programs i.e. end users of your system. To develop, you will need to install the JDK.

JVM (Java virtual machine)

JVM acts as a run-time engine to run Java applications. JVM is the one that actually calls the main method present in a java code. JVM is a part of JRE(Java Runtime Environment). When we compile a .java file, .class files with the same class names present in .java file are generated by the Java compiler. This .class file goes into various steps when we run it. These steps together describe the whole JVM. JVM becomes an instance of JRE at runtime of a Java program.