

Java Standard Edition

Object Oriented: Object-oriented programming is a method used for designing a program using classes and objects. Object-oriented programming is also called the core of java. Object-oriented programming organizes a program around objects and well-defined interfaces. In Java, everything is an Object. Java can be easily extended since it is based on the Object model.

Platform_ Independent: Java is platform-independent because it does not depend on any type of platform. Hence, Java is platform-independent language. In Java, programs are compiled into byte code and that byte code is platform-independent. This environment is the Java Virtual Machine (JVM). The JVM should be present to execute the code. The JVM is different for each platform. In the case of Java, platform independence does not mean that you can run the code anywhere; you can run it wherever the environment is provided.

Compiled / Interpreted approach: Java can be considered both a compiled and an interpreted language because its source code is first compiled into a binary byte-code. This byte-code runs on the Java Virtual Machine (JVM), which is usually a software-based interpreter.

JVM: A Java virtual machine (JVM) is a virtual machine that enables a computer to run Java programs as well as programs written in other languages that are also compiled to Java bytecode.

Dynamic Linking: When you run your program, the Java virtual machine loads your program's classes and interfaces and hooks them together in a process of dynamic linking. As your program runs, the Java virtual machine builds an internal web of interconnected classes and interfaces.

Multi-Threaded: Java is a multi-threaded programming language which means we can develop multi-threaded program using Java. A multi-threaded program contains two or more parts that can run concurrently and each part can handle a different task at the same time making optimal use of the available resources specially when your computer has multiple CPUs.

For Example: Simple Program

```
public class hello
{
    public static void main(String[] args)
    {
        // this is single line comment.
        /* and also used the multiple lines comments
```

```
In java */  
    System.out.println("Hello World");  
}  
}
```