**JAVA Features:**

1. **Object-Oriented language:** that means that JAVA is completely based on the classes and objects that we have to make on it. Without it, we cannot run it.

Like for e.g., we do not have to create any objects or classes in C, Pascal, we can directly run our code on it.

But, in case of JAVA, we have to built those first then write our code.

Due to this, JAVA is best suited for software development, building and maintenance purposes.

Hence, JAVA does not follow procedural oriented form of language.

1. **Platform-Independent**

JAVA code can run on any OS, on any system, or from one system to another system.

1. **Simple and Easy to use, easy Syntax**

Concepts like Pointers, Operators are removed from this language

1. **Secure**

By default, classes in JAVA are private. Hence security is good in this case.

Its programs are virus-free.

1. **Portable**

JAVA source codes can be compiled as Byte-code and that byte-code can run on any system.

1. **Compiled and Interpreted**

JAVA is a language which does both compilation and interpretation process in it.

.java (source code) -> (java compiler) -> .class (byte-code)

.class(byte-code) -> (through interpretation by JVM) -> Machine code (our result will be printed)

1. **Robust**

JAVA has in-built error-handling feature, hence showing where error occurred, how it occurred, and how it can be resolved.

JAVA has also a garbage collector, that is used in the process that if an object or a method is not used in a program, it is removed automatically to save resources.

1. **Distributed**

It’s programs can run on the internet and work done on this language, can be used distributively on different networks so that different protocols can be implemented easily.

1. **Multi-Threaded (V.Imp feature)**

There is a single common memory area for each thread created.

Each thread does not have to wait for another thread to get executed, or wait for its complete execution.

It can execute on its own.

**10) Performance**

High-performance language because it can be made into byte-code, which can be executed easily and fast.

1. **Dynamic**

We can make changes in run-time in the code. Changes like – creating objects, creating methods, creating class, etc.

**Q) Why JAVA is so popular ?**

**A)** Because of these features.

For learning purpose, it is made free. We can access its learning content free of cost.