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BSIS 2

**1.** Java was developed by James Gosling and his team at Sun Computers in the early 1990s. Originally called Oak, later given the name Java:

inspired by a coffee bean? or an acronym for the names of the team members: **J**ames Gosling, **A**rthur **V**an Hoff, and **A**ndy Bechtolsheim?

Though now often thought of as a program designed for the world wide web, it was originally meant to be a programming language for embedded systems. As the web gained in popularity in 1994, the Hot Java browser was a good demo of Java's capabilities: platform independence and security.

Java released publicly in 1995

**2.**  Platform independent means that the code remains the same irrespective of the platform involved. Java has something called a virtual machine called JVM or Java Virtual Machine. What happens in case of Java is that the JVM once installed on any platform like windows or OS X can run the java code without any alteration. The JVM acts like a virtual platform on which the code is executed. As the platform being JVM remains constant throughout all platforms Java programs can run on any platform irrespective of the real platform.

**3.** 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.

The **Java Runtime Environment (JRE)** is a set of software tools for development of Java applications. It combines the Java Virtual Machine (JVM), platform core classes and supporting libraries. JRE is part of the Java Development Kit (JDK), but can be downloaded separately.

A **Java virtual machine (JVM)** is an abstract computing machine that enables a computer to run a Java program. There are three notions of the JVM: specification, implementation, and instance. The specification is a document that formally describes what is required of a JVM implementation.

**4.** This is neccesary because main() is called by the JVM before any objects are made. Since it is static it can be directly invoked via the class. Similarly, we use static sometime for user defined methods so that we need not to make objects. void indicates that the main() method being declared does not return a value.

**5.** Java is not because it supports Primitive datatype such as int, byte, long... etc, to be used, which are not objects. Contrast with a pure OOP language like Smalltalk, where there are no primitive types, and boolean, int and methods are all objects