Lecture -1

Topics:-

1. What is Java ?
2. What can we do using Java ?
3. Types of Application.
4. Java Platforms/Editions.
5. What is Jdk, how to download and install ?
6. First Java Program.

Java

➔ It is object-oriented, high level programming language.
➔ It was developed by Sun MicroSystem in the year 1995.
➔ It is also a **platform.**

Platform: Any software or hardware environment in which a program runs.

What can we do using Java

➔ We can develop different applications like
   i) Desktop Application(pdf reader, antivirus, music player).
   ii) Web Application (gmail, non transaction application).
   iii) Enterprise Application(Banking applications, irctc)
   iv) Mobile Application
   v) Embedded System
   vi) Game

Types Of Applications

1) Standalone Application (Awt, swing)
2) Web Application(Servlet,jsp,Spring,Hibernate)
3) Enterprise Application (EJB)
4) Mobile Application(Android)

Java Platforms/Editions

1) Java SE(Standard Edition)

It is a platform, which include java programming API's such as

java.lang (Default)
java.io

java.net
java.util
java.sql
java.math
 and so on

It includes core topics like OOPs, String, Regex, Exception, Inner Class, Multithreading, collection etc.
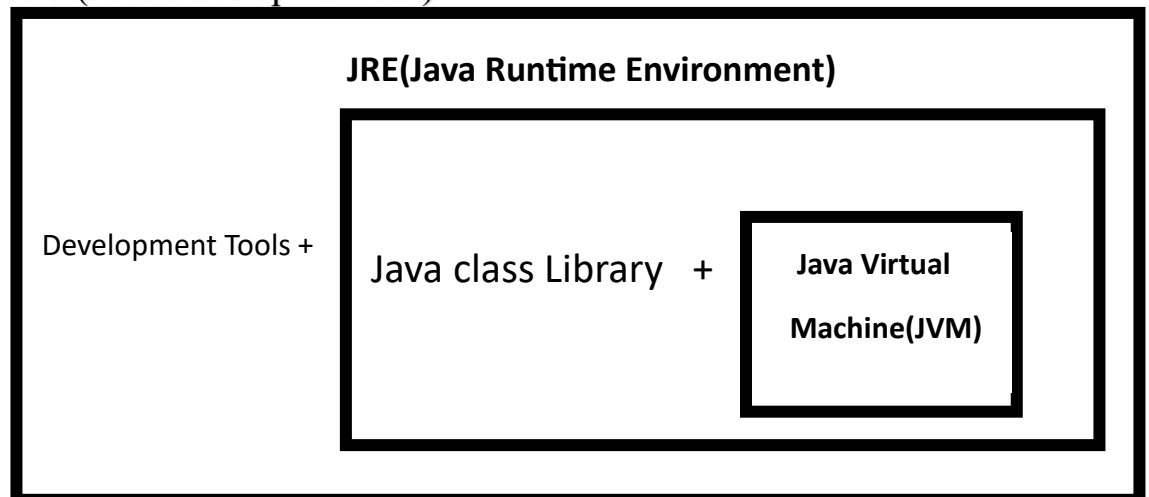
2) **Java EE(Enterprise Edition)**

Web Application.

3) **Micro Edition (Mobile Development)**

4) **Java FX**

➔ Internet application(Email, Skype,zoom)
➔ It uses a lightweight user interface API

JDK

JDK(Java Development Kit)

JRE(Java Runtime Environment)

Development Tools +   Java class Library   +   **Java Virtual Machine(JVM)**

First Program:-

```
public Class FirstJavaProgram
{
        public static void main(String args[])
        {
                System.out.println("Hello EveryOne");
        }
}
```

Save file as below

FirstJavaProgram.java