

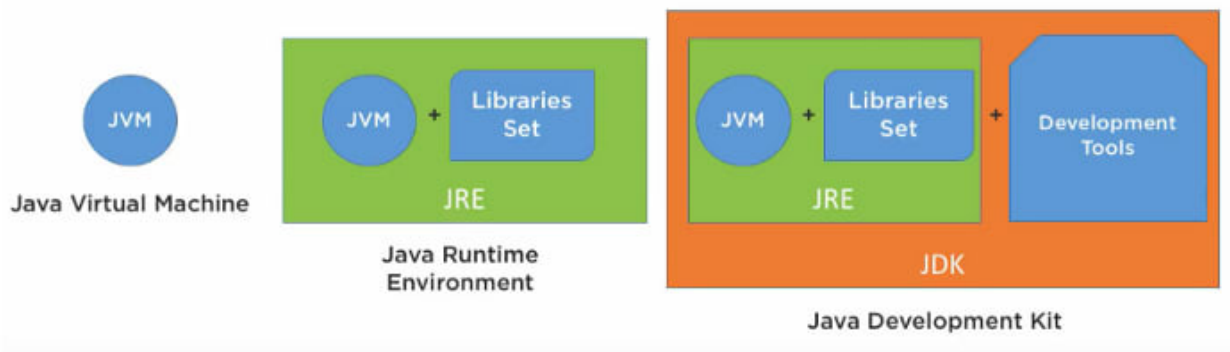
CORE JAVA

Date: 19-July-2022

1) WHAT IS PLATFORM INDEPENDENT AND DEPENDENT AMONG JDK,JRE,JVM?

Platform dependent means software will function only in one particular platform it won't work in all platforms means not in all operating systems. Platform independent means that the application can run in a diverse operating system.

Java is platform-independent but JVM is platform dependent so if JVM is platform dependent then JRE and JDK is also platform dependent as JVM comes under the JDK and JRE.



2) CAN WE USE/DOWNLOAD JRE DIRECTLY WITHOUT DOWNLOADING JDK?

First let's understand the work of JDK and JRE, so basically JDK (Java Development Kit) gives the Development tools, compiler and additional files to build the applications. JRE(Java Runtime Environment) is the implementation of JVM(Java Virtual Machine) and it is specially designed to execute Java programs.

So it depends on the situation. If we have byte code then only JRE is sufficient for the execution of the program but for compilation JDK is mandatory so it depends on the situation.

- 3) Create a simple class "HelloWorld" and print "HelloWorld".

```
Command Prompt
C:\Users\coditas\Desktop>javac HelloWorld.java

C:\Users\coditas\Desktop>java HelloWorld
Hello World

C:\Users\coditas\Desktop>
```

```
HelloWorld - Notepad
File Edit Format View Help
class HelloWorld{
    public static void main(String args[]){
        System.out.println("Hello World");
    }
}
```

- 4) Use The above-mentioned class and save this file as "HelloWolrd_Batch2 java" and try to execute the code.

Add the execution commands with proper output

```
Command Prompt
C:\Users\coditas\Desktop>javac HelloWorld_Batch2.java

C:\Users\coditas\Desktop>java HelloWorld
Hello World

C:\Users\coditas\Desktop>_
```

```
HelloWorld_Batch2.java - Notepad
File Edit Format View Help
class HelloWorld{
    public static void main(String args[]){
        System.out.println("Hello World");
    }
}
```

5) Create a Simple Calculator program.

```
import java.util.*;
class Calculator{

    //main function start from here

    public static void main(String args[]){
        int a = 20, b = 8;
        System.out.println("\nAddition of "+a+" and "+b+" is = " + add(a,
b)+"\n");
        System.out.println("\nSubtraction of "+a+" and "+b+" is = " +
sub(a, b)+"\n");
        System.out.println("\nMultiplication of "+a+" and "+b+" is = " +
mul(a, b)+"\n");
        System.out.println("\nDivision of "+a+" and "+b+" is = " + div(a,
b)+"\n");
    }

    //addition function start from here

    public static int add(int a, int b){
        return a + b;
    }

    //subtraction function start from here

    public static int sub(int a, int b){
        return a - b;
    }

    //multiplication function start from here

    public static int mul(int a, int b){
        return a * b;
    }

    //division function start from here

    public static float div(int a, int b){
        return (float)a / (float)b;
    }
}
```

}