PRACTICAL ASSIGNMENT-2

1. Write a Java program to check student class as per following criteria.
   Per < 35 then Student Fail
   Per < 50 then Student Class is Pass Class
   Per < 60 then Student Class is Second Class
   Per < 70 then Student Class is First Class
   Per > 70 Students get Distinction Marks

2. Write a java menu driven program using **switch case**
   a. Addition
   b. Subtraction
   c. Multiplication
   d. Division

3. Write a Java program to print days name of week using **switch case**
4. Write a Java program to demonstrate the use of **for each loop**.
5. Write a java program to perform the addition, subtraction, multiplication and division using **command line argument**.
6. Define a class for a shopping list. Enter the data member Item_Code, Item_Name and Item_Price. Create Object and Access Data Member and Display the sum of the price and display the item.
7. Define a class for employee. Enter the data member no, name, age and salary for three employee. Create Object and Access Data Member and display it.
8. **Create a class item**

```
Class item
{
        Int itemno;
        Int qty;
        Int rate;

        Void getitem()
        Void dishitem()
}
```

Use getitem() function to get the value of all items and use dishitem() to print the information of all items (itemno,qty,rate and amount)

9. **Create class book**

```
Class book
{
        int accno;
        char name[30];
        flaot price;

        void getdata();
        void dish();
}
```

Write Java program to create to get information of book and display it.

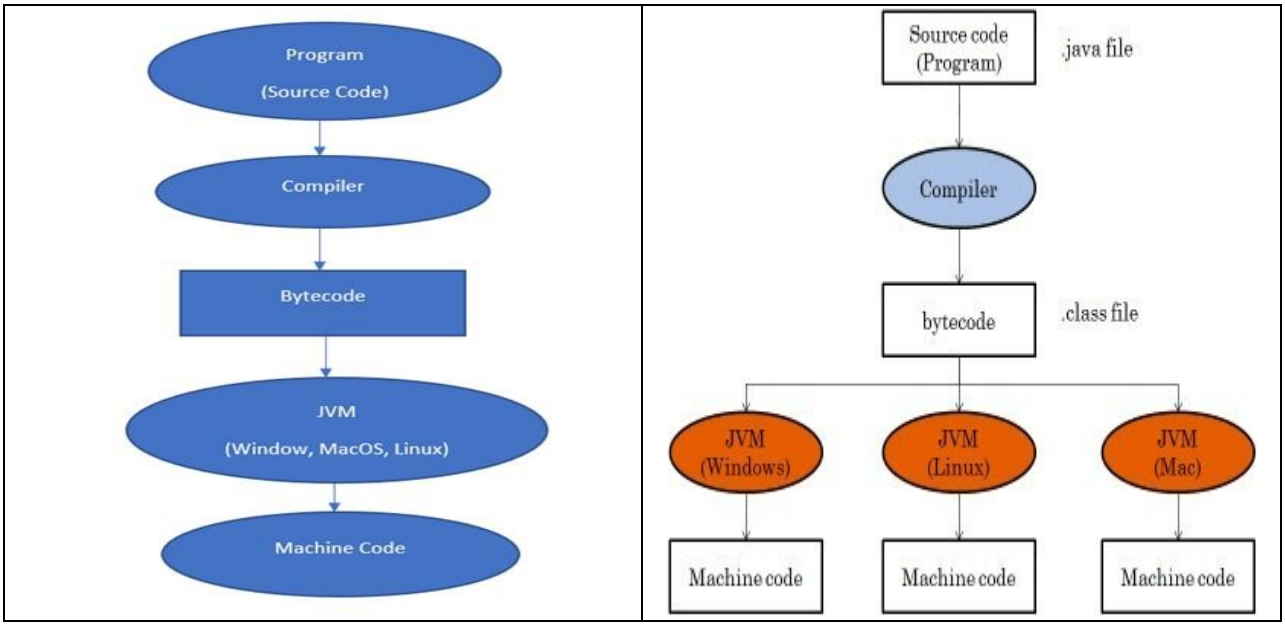
What is Java Bytecode?

Java bytecode is the instruction set for the Java Virtual Machine. It acts similar to an assembler which is an alias representation of a C++ code. As soon as a java program is compiled, java bytecode is generated. In more apt terms, java bytecode is the machine code in the form of a .class file. With the help of java bytecode we achieve platform independence in java.

What is Bytecode in Java and it's working?

Bytecode in Java is an intermediate machine-independent code. It is a set of instructions for Java Virtual Machine and it acts pretty similar to the assembler in C++. In general, bytecode is a code that lies between low-level and high-level language. The bytecode is not processed by the processor. It is processed by the Java Virtual Machine (JVM). The job of the JVM is to call all the required resources to compile the Java program and make the bytecode independent. It is the biggest reason why java is known as a platform-independent language. The intermediate code can run on any of the platforms such as Windows, macOS, and Linux.

Working of Java Bytecode



Program: Program is a .java file. It consists of the code that you have written.

Compiler: Compiler complies the .java file and generate .class file.

Bytecode: The .class file contains the bytecode. Now, we can run the .class file in any of the other platforms.

JVM: JVM runs the bytecode without considering a processor.

Machine Code: Now, the machine generates its own machine code in which the byte code is running. That means, its own machine-dependent code to run the .java file.

The only essential requirement for running the bytecode is the installation of basic java in any platform.