Branching

Java supports two selection statements - if and switch. These statements allow us to control the flow of the program. Depending upon the expressions or values, the corresponding blocks/statements of code will be executed or by passed.

The two statements are

if statement is a conditional branch statement. This is a two way branch statement. Depending upon the whether a condition is true or false, the corresponding code is executed.

switch statement is a multiway branch statement. Depending upon the value used for switching, the corresponding code is executed.

These two statements are very powerful and are used widely across any application. They provide effective solutions for branching problems.

If Statement

class PrintPassFail
{
    public static void main(String arg[])
    {
        int marks = 62;
        if(marks > 35)            // LINE A
        {
            System.out.println("Pass");     // LINE B
        }
        else
        {
            System.out.println("Fail");     // LINE C
        }

    }
}

Switch Statement

A switch statement allows a variable to be tested for equality against a list of values. Each value is called a case, and the variable being switched on is checked for each case.

public class SwitchDemo {

 public static void main(String[] args) {

 int month = 8;

 String monthString;

 switch (month) {

 case 1: monthString = "January";

 break;

 case 2: monthString = "February";

 break;

 case 3: monthString = "March";

 break;

 case 4: monthString = "April";

 break;

 case 5: monthString = "May";

 break;

 case 6: monthString = "June";

 break;

 case 7: monthString = "July";

 break;

 case 8: monthString = "August";

 break;

 case 9: monthString = "September";

 break;

 case 10: monthString = "October";

 break;

 case 11: monthString = "November";

 break;

 case 12: monthString = "December";

 break;

 default: monthString = "Invalid month";

 break;

 }

 System.out.println(monthString);

 }

}