

SWITCH STATEMENT IN JAVA

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.

Syntax:

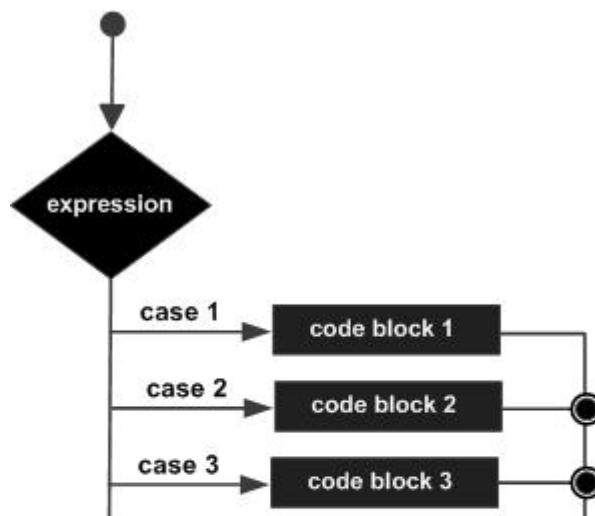
The syntax of enhanced for loop is:

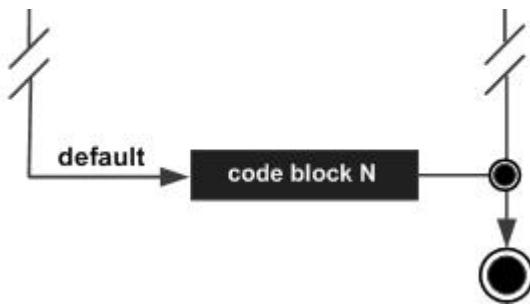
```
switch(expression){  
    case value :  
        //Statements  
        break; //optional  
    case value :  
        //Statements  
        break; //optional  
    //You can have any number of case statements.  
    default : //Optional  
        //Statements  
}
```

The following rules apply to a **switch** statement:

- The variable used in a switch statement can only be integers, convertable integers *byte, short, char, strings and enums*
- You can have any number of case statements within a switch. Each case is followed by the value to be compared to and a colon.
- The value for a case must be the same data type as the variable in the switch and it must be a constant or a literal.
- When the variable being switched on is equal to a case, the statements following that case will execute until a *break* statement is reached.
- When a *break* statement is reached, the switch terminates, and the flow of control jumps to the next line following the switch statement.
- Not every case needs to contain a *break*. If no *break* appears, the flow of control will *fall through* to subsequent cases until a *break* is reached.
- A *switch* statement can have an optional default case, which must appear at the end of the switch. The default case can be used for performing a task when none of the cases is true. No *break* is needed in the default case.

Flow Diagram





Example:

```

public class Test {

    public static void main(String args[]){
        //char grade = args[0].charAt(0);
        char grade = 'C';

        switch(grade)
        {
            case 'A' :
                System.out.println("Excellent!");
                break;
            case 'B' :
            case 'C' :
                System.out.println("Well done");
                break;
            case 'D' :
                System.out.println("You passed");
            case 'F' :
                System.out.println("Better try again");
                break;
            default :
                System.out.println("Invalid grade");
        }
        System.out.println("Your grade is " + grade);
    }
}

```

Compile and run above program using various command line arguments. This would produce the following result:

```

$ java Test
Well done
Your grade is a C
$ Loading [MathJax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js

```