

## Selection – switch Structure

The switch statement can be used for numerous paths when choosing a path based on a single value rather than a range. It starts execution at body of 1<sup>st</sup> matching value and continues until the `break` statement.

### Syntax

```
switch (expression)
{
    case ordinal value: [case ordinal value:]
        //body of 1st case(s)
        [break;]

    case ordinal value: [case ordinal value:]
        //body of 1st case(s)
        [break;]

    [
        default:
            //body of default executed if not previous match
    ]
}
```

### Example

```
// The "Switch" class.

public class Switch
{
    public static void main (String [] args)
    {
        final int ADD = 1;
        final int SUBTRACT = 2;

        Scanner sc = new Scanner(System.in);

        int option;
        int operand1, operand2;
        int operation;

        System.out.println ("Calculations\n");
        System.out.println ("Enter two operands to manipulate");
        System.out.print ("operand 1: ");
        operand1 = sc.nextInt ();
        System.out.print ("operand 2: ");
        operand2 = sc.nextInt ();

        System.out.println ("\nOperator Menu\n");
        System.out.println (ADD + ": Addition");
```

```

System.out.println (SUBTRACT + ": Subtraction");
System.out.print ("What calculation do you want to perform: ");
operation = sc.nextInt ();

switch (operation)
{
    case ADD:
        System.out.println ("result = " + (operand1 +
operand2));
        break;

    case SUBTRACT:
        System.out.println ("result = " + (operand1 -
operand2));
        break;

    default:
        System.out.println ("Invalid option. Try again");
}
} // main method
} // Switch class

```

Additional information on the switch statement found at:

<http://java.sun.com/docs/books/tutorial/java/nutsandbolts/switch.html>