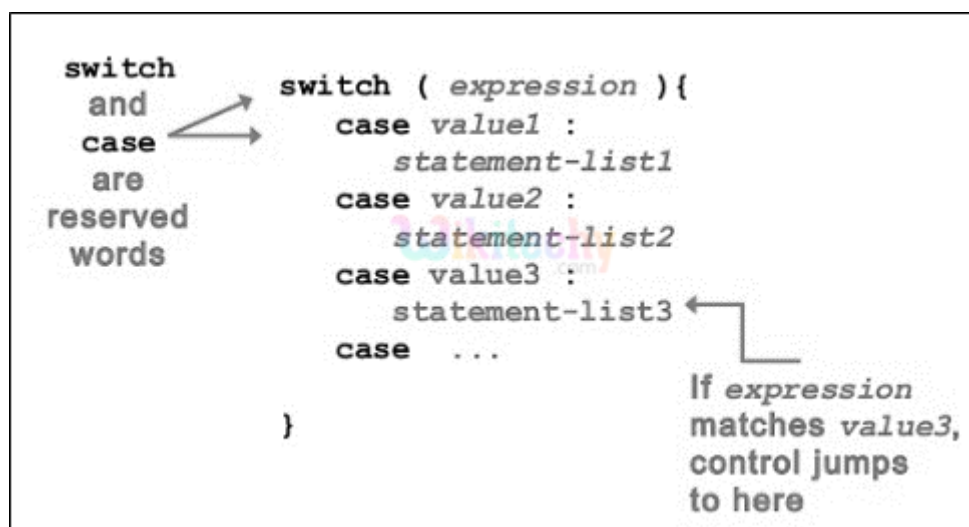


Java - Switch Case Statements

- ◆ Permits a variable to be **tested for sameness** against a set of values.
- ◆ Allows **multi-way branching**.
- ◆ Each value is termed as case.
- ◆ Variable being switched on is tested in each case.
- ◆ Switch expression type can be a **char, byte, short, or int**.
- ◆ Case values should be **literals and compatible** with the expression.
- ◆ No two case values must be same.
- ◆ The **default** statement is **optional**.
- ◆ It is executed in case no match found for the expression.
- ◆ The **break** statement is **optional**.
- ◆ Can be nested.



Java Switch Case

Syntax:

```
switch(expression)
{
    case value :
        //Set of Statements
        break; //optional

    case value :
        // Set of Statements
        break; //optional

    //Multiple case statements are allowed
    default: //Optional
        // Set of Statements
        break;
}
```

Sample Code:

```
class MySwitchSample
{
    public static void main(String[] args)
    {
        System.out.println("\n\nWikiTechy - Switch Case Statements\n");
        int week = Integer.parseInt(args[0]);
        switch (week)
        {
            case 1: System.out.println("First day of the week: Sunday");
                    break;
            case 2: System.out.println("Second day of the week: Monday");
                    break;
            case 3: System.out.println("Third day of the week: Tuesday");
                    break;
            case 4: System.out.println("Fourth day of the week: Wednesday");
                    break;
            case 5: System.out.println("Fifth day of the week: Thursday");
                    break;
            case 6: System.out.println("Sixth day of the week: Friday");
                    break;
            case 7: System.out.println("Seventh day of the week: Saturday");
                    break;
            default: System.out.println("Invalid data for Week");
                    break;
        }
    }
}
```

Code Explanation:

```
class MySwitchSample
{
    public static void main(String[] args)
    {
        System.out.println("\n\nWikiTechy - Switch Case Statements\n\n");
        int week = Integer.parseInt(args[0]);
        switch (week)
        {
            case 1: System.out.println("First day of the week: Sunday"); break;
            case 2: System.out.println("Second day of the week: Monday"); break;
            case 3: System.out.println("Third day of the week: Tuesday"); break;
            case 4: System.out.println("Fourth day of the week: Wednesday"); break;
            case 5: System.out.println("Fifth day of the week: Thursday"); break;
            case 6: System.out.println("Sixth day of the week: Friday"); break;
            case 7: System.out.println("Seventh day of the week: Saturday"); break;
            default: System.out.println("Invalid data for Week"); break;
        }
    }
}
```

- 1 Reading **command line argument** value and converting it to integer using the code `int week = Integer.parseInt(args[0]);`
- 2 Switch statement with **expression** as the variable `week` is indicated by code `switch (week)`.
- 3 Different **case statements** are defined to branch upon based on the value of variable `week` as follows:

case 1: `System.out.println("First day of the week: Sunday"); break;`

case 2: `System.out.println("Second day of the week: Monday"); break;`

case 3: `System.out.println("Third day of the week: Tuesday"); break;`

case 4: `System.out.println("Fourth day of the week: Wednesday");`

`break;`

case 5: `System.out.println("Fifth day of the week: Thursday"); break;`

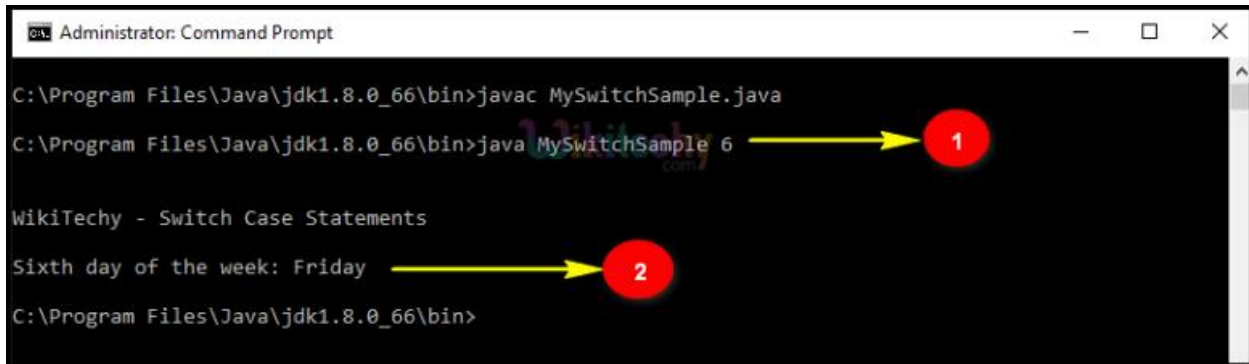
case 6: `System.out.println("Sixth day of the week: Friday"); break;`

case 7: `System.out.println("Seventh day of the week: Saturday");`

`break;`

- 4 The **default** statement is defined and executed when none of case values matches with the value of variable **week**. This is done by the code
- ```
default: System.out.println("Invalid data for Week");break;
```

## Output:



```
Administrator: Command Prompt
C:\Program Files\Java\jdk1.8.0_66\bin>javac MySwitchSample.java
C:\Program Files\Java\jdk1.8.0_66\bin>java MySwitchSample 6
WikiTechy - Switch Case Statements
Sixth day of the week: Friday
C:\Program Files\Java\jdk1.8.0_66\bin>
```

- 1 Command line argument input is given as **6** while executing the code in the output console. This is performed by the line
- ```
java MySwitchSample 6
```
- 2 The value **6**, matches with **case 6** as per the code and hence the output in the console window is: **Sixth day of the week: Friday**