Switch - case :- It is also another Conditional Construct that control the flow of program

It is used ~~to~~ check a variable for multiple constant values.

if - else is used to all types of Comparison whereas switch - case is used to ~~all types of Comparis~~ only constant Comparison.

Syntax

```
switch (variable / expression)
{
  case constant 1 :
       stat 1 ;
       .
       .
       stat N ;
       break ;

  case constant 2 :
       stat 1 ;
       .
       .
       stat N
       break ;
  .
  .
  .
```

```
case constantN :
        stat1;
        :
        statN;
        break;
default : stat1;
        statN;
        break;
}
```

Note :- 1) switch, case, default and break are keywords

2) We can not repeat case value

3) case values has no sequence

4) We can not use floating constant with case

5) default is an optional part

6) We can place default anywhere inside the switch

7) When we missing break then fallback is occured

WAP that read day Number from User and display day Name

```
import java.util.*;
class A
{
public static void main (String K L7)
}
Scanner ob = new Scanner (System.in);
    SOPL ("enter day No.");
    int a = ob.nextInt();
```

```
switch(a)
}
 case 1:
    SOPL ("Monday");
    break;
 case 2:
    SOPL ("Tuesday");
    break;
 :
case 7:
    SOPL ("Sunday");
    break;
default:
    SOPL ("Wrong day No");
    break;
} }
```

```
if (a == 1)
   SOPL ("Monday");
else if (a == 2)
    SOPL ("Tuesday");
 :
else if (a == 7)
    SOPL ("Sunday");
else
  SOPL ("Wrong day No");
} }
```

WAP that read a character from User and check given character is Vowel or Not

```
:
Scanner ob = new Scanner(System.in);
    SOPL("enter a character");
char ch = ob.nextline().charAt(0);
Switch (ch)
{
    case 'a':
    case 'A':
    case 'e':
    case 'E':
    case 'i':
    case 'I':
    case 'o':
    case 'O':
    case 'u':
    case 'U':
        SOPL("Vowel");
        break;
    default:
        SOPL("Consonant");
        break;
}
```

WAP that read a No from user and check given No is even or odd (by using switch-case)

```
:
Scanner ob = new Scanner(System.in);
SOPL("enter a No");
int a = ob.nextInt();
switch(a%2)
{
  case 0:
    SOPL("even No");
    break;
  case 1:
    SOPL("odd No");
    break;
}
```

Valid / Invalid

1) case 1: ✓

2) case 'a': ✓

3) case "ram" : ✓

4) case 1.0 : ✗ C.T. Error

5) case 1+1 : ✓

6) int m = 1;

:

case m+1 : ✗ C.T. Error

7) final int m = 1;

:

case m+1 : ✓

---

8) int a = ob.nextInt();

switch (a)

{

case 1 :

sopl ("Hello");

break;

case 1 : ⟶ C.T. Error

sopl ("Bye");

break;

}

Fallback in switch_case

When we missing break then fallback is occured

```
int a = ob.nextInt();
switch (a)
{
    case 1:
        SOPL ("Hello");

    case 2:
        SOPL ("Good");

    case 3:
        SOPL ("Day");

    default:
        SOPL ("Bye");
}
```

a = 1	a = 2	a = 3
Hello	Good	Day
Good	Day	Bye
Day	Bye	a = 4
Bye		Bye

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```
int a = ob.nextInt();

switch (a)
{
    case 1:
        sopl ("Hello");

    case 2:
        sopl ("Good");

    case 3:
        sopl ("Day");

        break;

    case 4:
        sopl ("Bye");

    default:
        sopl ("Have a Nice day");
}
```

a = 1	a = 2	a = 3	4
Hello Good Day	Good Day	Day	Bye Have a Nice day

WAP that read two Number and a choice b/w 1 to 4 from user and display result according choice

Choice	Result
1	addition
2	Substract
3	Multiply
4	Divide
other	Wrong choice

```
:
Scanner Ob = new Scanner (System.in);
SOPL ("enter two No");
int a = ob.nextInt();
int b = ob.nextInt();
SOPL (" Press 1 for Addition \n Press 2 for Sub
      \n Press 3 for multiply \n Pr 4
                              Divide");
int c = ob.nextInt();
Switch (c)
{
    Case 1:
        SOPL (a+b);
        break;
```

```
case 2:
    sopl(a-b);
    break;

case 3:
    sopl(axb);
    break;

case 4:
    sopl(a/b);
    break;

default:
    sopl("wrong choice");
}
```