SWITCH EXECUTED IN 3 WAYS

```
package ABC;

import java.util.Scanner;

public class A1 {

     public static void main(String[] args) {
          Scanner s= new Scanner(System.in);

        System.out.println("Enter percentage  :");
        int percentage = s.nextInt();
        System.out.println(" percentage  :" + percentage);

        System.out.println("SWITCH WITHOUT BREAK");
        switch(percentage)
        {
            case 95: System.out.println(" Excellent ");

            case 85:  System.out.println(" V Good ");

            case 75:System.out.println("  Good ");

            default: System.out.println(" Sorry Try Again
");
        }

        System.out.println("SWITCH WITH BREAK");
        switch(percentage)
        {
            case 95: System.out.println(" Excellent
");break;

            case 85:  System.out.println(" V Good ");break;

            case 75:System.out.println("  Good ");break;
```

```
            default: System.out.println(" Sorry Try Again
");break;
        }

        System.out.println("SWITCH |: REPLACED WITH -> |
WITHOUT BREAK");
        switch(percentage)
        {
            case 95-> System.out.println(" Excellent ");

            case 85->  System.out.println(" V Good ");

            case 75->System.out.println("  Good ");

            default-> System.out.println(" Sorry Try Again
");
        }

        System.out.println(" Thank You ");


    }

}
```

```
Enter percentage  :
85
 percentage  :85
SWITCH WITHOUT BREAK
 V Good
  Good
 Sorry Try Again
SWITCH WITH BREAK
 V Good
SWITCH |: REPLACED WITH -> | WITHOUT BREAK
 V Good
 Thank You
```

Core Java | DAY 11

- LOOPING

Repeatedly same statement/statements get executed till condition results **TRUE**

- For loop

```
for(exp1  ; exp2 ; exp3)
{
statements
}
```

```
for(initialisation  ; condition ; increment/decrement)
{
statements
}
```

```
int I;
for (i=0;i<10;i++)
{
System.out.println(i);
}
```

Example 1:
for loop
reverse and forward loop

```
package ABC;

import java.util.Scanner;

public class A1 {

     public static void main(String[] args) {
          Scanner s= new Scanner(System.in);

         System.out.println("Enter n value <=20 :");
         int n = s.nextInt();
         System.out.println(" percentage  :" + n);

         int i;

         System.out.println("********** FORWARD FOR LOOP
******");

         for (i=0;i<=n;i++)
         {
         System.out.print(i);
         System.out.println(" | HI");
         }


         System.out.println("********** REVERSE FOR LOOP
******");

         for (i=20;i>=n;i--)
```

```
        {
        System.out.print(i);
        System.out.println(" | welcome ");
        }
        System.out.println("Thank you");

    }

}
```

output

```
Enter n value <=20 :
5
 percentage  :5
********** FORWARD FOR LOOP ******
0 | HI
1 | HI
2 | HI
3 | HI
4 | HI
5 | HI
********** REVERSE FOR LOOP ******
20 | welcome
19 | welcome
18 | welcome
17 | welcome
16 | welcome
15 | welcome
14 | welcome
13 | welcome
12 | welcome
11 | welcome
10 | welcome
9 | welcome
8 | welcome
7 | welcome
6 | welcome
5 | welcome
Thank you
```

- While

```
initialisation ;
while(condition)
{
Statements
increment/decrement;
}
```

Example 1:
While loop
Reverse and forward loop

```
package ABC;

import java.util.Scanner;

public class A1 {

     public static void main(String[] args) {
          Scanner s= new Scanner(System.in);

         System.out.println("Enter n value <=20 :");
         int n = s.nextInt();
         System.out.println(" percentage  :" + n);

         int i;

         System.out.println("********** FORWARD while LOOP
******");
         i=0;
```

```
        while (i<=n)
        {
        System.out.print(i);
        System.out.println(" | HI");
        i++;
        }


        System.out.println("********** REVERSE while LOOP
******");
        i=20;
        while (i>=n)
        {
        System.out.print(i);
        System.out.println(" | welcome ");
        i--;
        }
        System.out.println("Thank you");

    }

}
```

```
Enter n value <=20 :
5
 percentage  :5
********** FORWARD while LOOP ******
0 | HI
1 | HI
2 | HI
3 | HI
4 | HI
5 | HI
********** REVERSE while LOOP ******
20 | welcome
19 | welcome
18 | welcome
17 | welcome
```

```
16 | welcome
15 | welcome
14 | welcome
13 | welcome
12 | welcome
11 | welcome
10 | welcome
9 | welcome
8 | welcome
7 | welcome
6 | welcome
5 | welcome
Thank you
```

Example 2:
While
using expression (no initialisation)

```
package ABC;

import java.util.Scanner;

public class A1 {

     public static void main(String[] args) {
          Scanner s= new Scanner(System.in);

         System.out.println("Enter marks1 and marks2  :");
         int marks1 = s.nextInt();
         int marks2 = s.nextInt();
         System.out.println(" marks1  :" + marks1);
         System.out.println(" marks2  :" + marks2);


         while ((marks1 < 100) && (marks2 < 100))
         {
```

```
          System.out.println("welcome |Total is
"+(marks1+marks2));

          marks1+=10;marks2+=15;
        }


        System.out.println("Thank you");

     }

}
```

```
Enter marks1 and marks2  :
55 45
 marks1  :55
 marks2  :45
welcome |Total is 100
welcome |Total is 125
welcome |Total is 150
welcome |Total is 175
Thank you

Enter marks1 and marks2  :
99 99
 marks1  :99
 marks2  :99
welcome |Total is 198
Thank you
```

○ Do while

```
initialisation ;
do
{
statements
increment/decrement;
}
while(condition);
```

Example 1:

```
package ABC;

import java.util.Scanner;

public class A1 {

	public static void main(String[] args) {
		Scanner s= new Scanner(System.in);

		System.out.println("Enter marks1 and marks2  :");
		int marks1 = s.nextInt();
		int marks2 = s.nextInt();
		System.out.println(" marks1  :" + marks1);
		System.out.println(" marks2  :" + marks2);
		 /*
		  * while ((marks1+marks2)<=200) {
		  * System.out.println("welcome |Total is
"+(marks1+marks2));
		  *
```

```
            * marks1+=10;marks2+=15; }
            */



             do
             {
                  System.out.println("welcome |Total is
"+(marks1+marks2));

             marks1+=10;marks2+=15;
             }
             while ((marks1+marks2)<=200);


         System.out.println("Thank you");

     }

}
Enter marks1 and marks2  :
101 101
 marks1  :101
 marks2  :101
welcome |Total is 202
Thank you
```