Example 1 | while loop

```
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         Scanner <u>s</u>= 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);
        int i=1;
           while ((marks1+marks2)<=200) {</pre>
         System.out.println("----- cycle | " + i);
         System.out.println("welcome | Total is
"+(marks1+marks2));
           marks1+=10;
           marks2+=15;
           System.out.println(" MODIFIED | marks1 :" +
marks1 + " marks2 :" + marks2);
           i++;
           }
        System.out.println("Thank you");
    }
```

Enter marks1 and marks2 : 55 65 marks1 :55 marks2 :65 ----- cycle |1 welcome |Total is 120 MODIFIED | marks1 :65 marks2 :80 ----- cycle |2 welcome | Total is 145 MODIFIED | marks1 :75 marks2 :95 ----- cycle |3 welcome | Total is 170 MODIFIED | marks1 :85 marks2 :110 ----- cycle |4 welcome | Total is 195 MODIFIED | marks1 :95 marks2 :125 Thank you

}

Example 2 | While loop

```
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         Scanner s= new Scanner(System.in);
           int i=1,n;
           boolean state=true;
           System.out.println("Enter n :");
           n = s.nextInt();
           while (state) {
                if(i>=n)
              {
                   state=false;
              }
                System.out.println("Enter name :");
                String name = s.next();
                System.out.println("hi " +name);
         i++;
           }
        System.out.println("Thank you");
    }
}
```

Loop Control

<u>Break</u>

stops execution of loop and comes out of loop.

break;

```
example:
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         Scanner s = new Scanner(System.in);
         int i = 1, n;
         System.out.println("Enter n :");
         n = s.nextInt();
         while (true) {
                   System.out.println("Enter name :");
                   String name = s.next();
                   System.out.println("hi " + name);
                   i++;
                   if (i > n)
    break;//breaks the loop and comes out of while loop
         }
         System.out.println("Thank you");
```

```
}
}
Enter n :
5
Enter name :
sam
hi sam
Enter name :
ram
hi ram
Enter name :
sana
hi sana
Enter name :
sita
hi sita
Enter name :
priya
hi priya
Thank you
```

```
Example:
package ABC;
import java.util.Scanner;
public class A1 {
     public static void main(String[] args) {
         int i=1;
         while (true) {
              System.out.println(i);
              i++;
              if (i > 25)
              break;//breaks the loop and comes out of while
loop
          }
         System.out.println("Thank you");
     }
}
1
2
3
4
5
6
7
8
9
10
11
```

Thank you

continue

stops execution of current cycle and continues with next cycle.

continue;

example for continue

```
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         int i = 1;
          System.out.println("--- for loop with continue ");
         for (i = 0; i < 5; i++)
         {
              System.out.println("hi");
              if (i ==3)
                   continue;// breaks the loop and comes out
of while loop
              System.out.println(i);
              System.out.println("*");
              System.out.println("**");
              System.out.println("***");
         }
```

```
System.out.println("Thank you");
     }
}
--- for loop with continue
hi
0
*
**
***
hi
1
*
**
***
hi
2
*
**
***
hi
hi
4
*
***
Thank you
```

```
Example for break and continue
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         int i = 1;
         System.out.println("--- for loop with break ");
         for (i = 0; i < 5; i++)
         {
              System.out.println("hi");
              if (i ==3)
                   break;// breaks the loop and comes out of
while loop
              System.out.println(i);
              System.out.println("*");
              System.out.println("**");
              System.out.println("***");
         }
          i = 1;
          System.out.println("--- for loop with continue ");
         for (i = 0; i < 5; i++)
         {
              System.out.println("hi");
              if (i ==3)
                   continue;// breaks the loop and comes out
of while loop
```

```
System.out.println(i);
System.out.println("*");
System.out.println("**");
System.out.println("***");
}
System.out.println("Thank you");
}
```

```
--- for loop with break
hi
0
**
***
hi
1
**
***
hi
2
**
***
hi
--- for loop with continue
hi
0
*
**
***
hi
```

```
1
*
**
**
**
hi
2
*
**
**

**

**

Thank you
```

Example

- if else
- ternary operator

```
package ABC;
import java.util.Scanner;
public class A1 {
    public static void main(String[] args) {
         int i=25;
         if(i>10)
         System.out.println("Thank you");
         else
              System.out.println("gudbye");
         }
         System.out.println( i>10 ? "Thank you" :
"gudbye");
    }
Thank you
Thank you
```