

Looping Control Statements

These are used to execute a block of statements multiple times. It means it executes the same code multiple times so it saves code. These are also called Iteration statements.

There are three types of looping control statements, they are as follows:

- **For loop**

It executes the code until condition is false.

It is used when number of iterations are known.

Syntax:

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

Example:

```
public class Main
{
    public static void main(String[] args)
    {
        for (int i = 0; i < 5; i++)
        {
            System.out.println(i);
        }
    }
}
```

Output: 0 1 2 3 4

- **While loop**

While loop executes till the condition becomes false.

Syntax:

```
while(condition)
{
    //statements
}
```

Example:

```
public class Main
{
    public static void main(String[] args)
    {
        int i = 0;
        while (i < 5)
        {
            System.out.println(i);
            i++;
        }
    }
}
```

```
}  
}  
}
```

Output: 0 1 2 3 4

- **Do-while loop**

When you are using for or while, then it will execute the loop body only if the condition is true.

In do-while loop, it will execute the loop first, then it checks the condition. So, it will execute the loop at least once.

It is called exit controlled loop while for & while loop are called entry controlled loop.

Syntax:

```
do{  
  
    //statements  
  
}while(condition);
```

Example:

```
public class Main {  
  
    public static void main(String[] args) {  
  
        int i = 0;  
  
        do  
  
        {  
  
            System.out.println(i);  
  
            i++;  
  
        } while (i < 5);  
  
    }  
  
}
```

Output: 0 1 2 3 4