

Chapter 5 Loop Control instructions by Munawar

Sometimes we want our programs to execute a few set of instructions over and over again for example print 1 is 1000, print multiplication table of 7 etc.

Loops make it easy for us to tell the computer that a given set of instructions need to be executed repeatedly.

Type of loops

Primarily, there are three types of loops in java.

1. While Loop
2. Do while Loop
3. for Loop

We will look into these one by one

While Loop

While (Boolean condition)

```
{  
// statement ----- > this keeps executing as long as the condition is true.  
}
```

If the condition never becomes false, the while loop keeps getting executed. Such a loop is known as an infinite loop.

Quick quiz: Write a program to print natural numbers from 100 to 200.

```
int i=100;  
while (i<=200){  
    System.out.println(i);  
    i++;  
}
```

Source Code

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {

        // While loop
        int k=1;
        while (k<=5){
            System.out.println(k);
            k++;
        }
        System.out.println("Complete the while loop execution");

        //      // infinite while loop
        //      while (true){
        //          System.out.println("infinite while loop");
        //      }

        int i=100;
        while (i<=200){
            System.out.println(i);
            i++;
        }
    }
}
```

Thank You