



for loop

Use the for loop when the number of iterations are fixed or known in advance.

Objectives

Upon completion of this topic, we will be able to:

- Learn and use the for loop

for Loop

The usage of **for** loop is as follows:

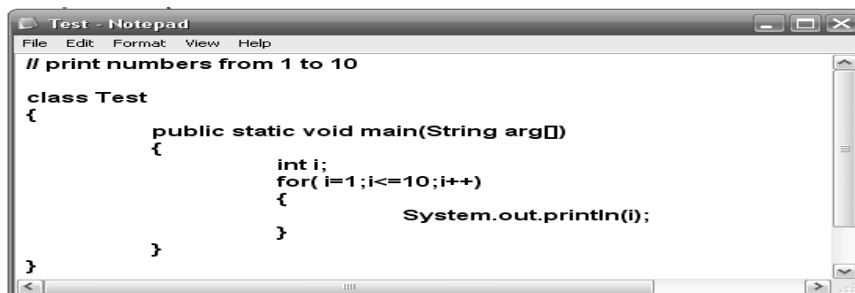
for (initial statement; termination condition; increment instruction)

statement;

When multiple statements are to be included in the **for** loop, the statements are included inside the flower braces as below:

```
for (initial statement; termination condition; increment instruction) {  
    Statement 1;  
    statement 2;  
}
```

The example below prints numbers from 1 to 10.

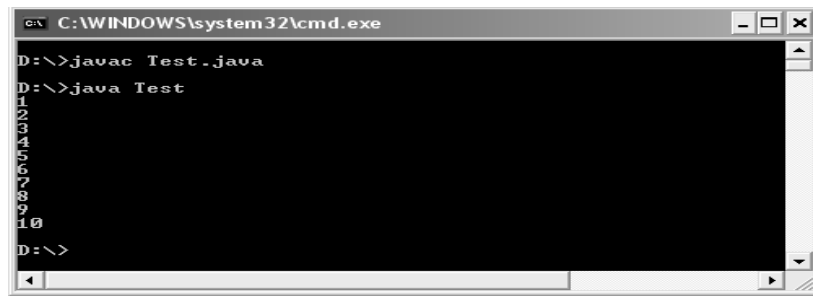


```
// print numbers from 1 to 10  
  
class Test  
{  
    public static void main(String arg[])  
    {  
        int i;  
        for( i=1;i<=10;i++)  
        {  
            System.out.println(i);  
        }  
    }  
}
```

For loop example program



The result of the above program is shown below:



```
C:\WINDOWS\system32\cmd.exe
D:\>javac Test.java
D:\>java Test
1
2
3
4
5
6
7
8
9
10
D:\>
```

Result of the above for loop program

Like all the other programming languages, Java allows loops to be nested. That is, one loop may be inside another. For example, here is a program that nests **for** loops:

// Loops may be nested.

```
class Nested {
    public static void main(String args[ ]) {
        int i, j;
        for(i=0; i<10; i++) {
            for(j=i; j<10; j++)
                System.out.print(".");
            System.out.println();
        }
    }
}
```

The output produced by this program is shown here:

```
.....
.....
.....
.....
.....
```



.....



Summary

Here are the key takeaways:

- When multiple statements are to be included in the for loop, the statements are included inside flower.