Looping statement

- For loop
- While loop
- Do-while loop
- For-each loop

Loop:-

When ever want to repeat certain statements several times then we should write those statements inside loop boody

For loop:

Syntax:-

```
for(initialization; condtion; incr/decr)
{
  //code
}
```

Program:-

```
import java.util.Scanner;
class text{
   public static void main(String[] args) {
        System.out.print("enter any number: ");
        Scanner obj=new Scanner(System.in);
        int num=obj.nextInt();
        for(int i=1; i<=10; i++){
            System.out.println(i*num);
        }
   }
   OUTPUT- enter any number: 2
   4
   6
   8
   8
   10
   12
   14
   16
   18
   20
   </pre>
```

While loop:

Syntax:-

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

Program:-

```
import java.util.Scanner;

class text {
    public static void main(String[] args) {
        System.out.print("enter any number: ");
        Scanner obj = new Scanner(System.in);
        int num = obj.nextInt();
        while (num >= 0) {
            if (num % 2 == 0) {
                System.out.print("even number:");
                break;
        } else {
                System.out.print("odd number: ");
                break;
        }
    }
}
OUTPUT:- enter any number: 2
even number
```

do -while loop

syntax:-

```
do{
    statement;
    incr/decr
}
while(condtion);
```

Program:-

```
import java.util.Scanner;

class text {
    public static void main(String[] args) {
        System.out.print("enter any number: ");
}
```

```
Scanner obj = new Scanner(System.in);
   int num = obj.nextInt();
   do {
        System.out.println(num + " ");
        ++num;
   } while (num <= 10);

}
enter any number: 1
1
2
3
4
5
6
7
8
9
10</pre>
```

For-each loop

Syntax:-

```
for(dataType item : array) {
    ...
}
```

Program:-

```
class text {
    public static void main(String[] args) {
        int num[] = { 1, 2, 3, 4, 5, 6, 7 };
        for (int i : num) {
            System.out.println(i);
        }
    }
}
OUTPUT:
1
2
3
4
5
6
7
```