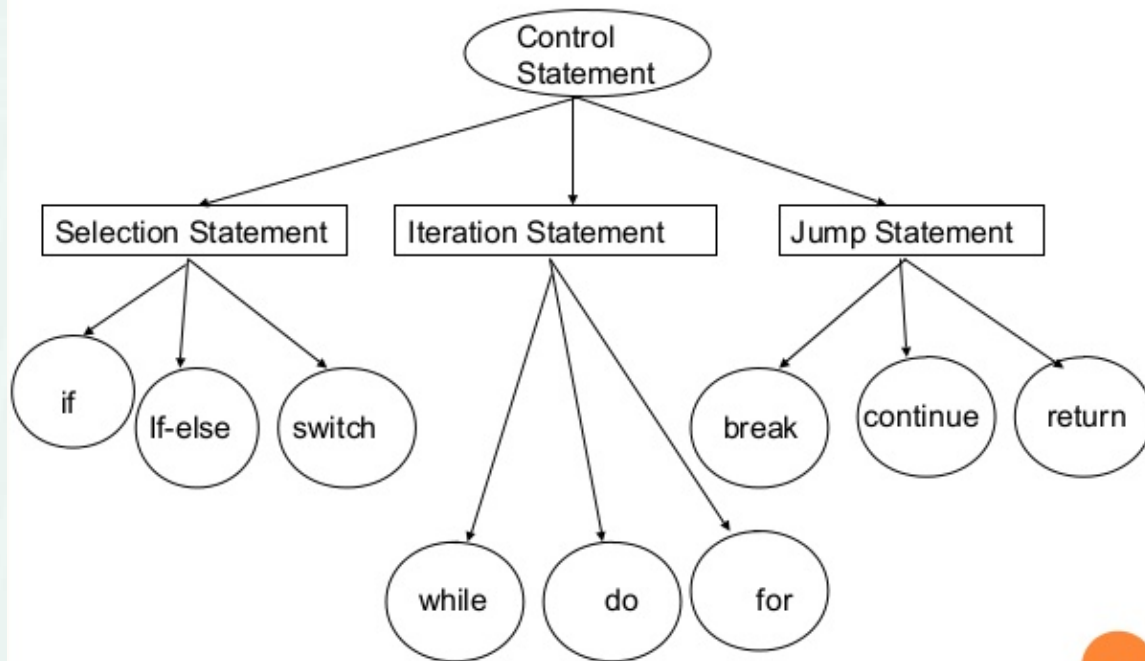


Control Statements: Sikllar

JAVA CONTROL STATEMENTS



For Loop

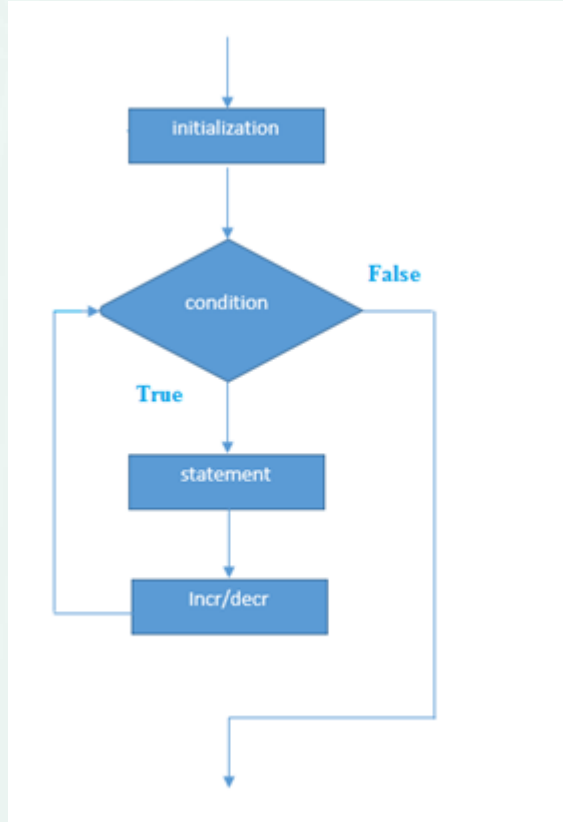
Javada for loop dan dasturning ma'lum bir qismini takroriy bir necha bor bajarish uchun foydalaniladi. Agar takrorlanishlar soni aniq bo'lsa, u holda for loop dan foydalangan maqsadga muvofiq. Uning quyidagi uchta turi mavjud:

1. Simple For Loop
2. For-each or Enhanced For Loop (Kuchaytirilgan)
3. Labeled For Loop

Syntax:

```
for(initialization;condition;incr/decr){  
    //code to be executed  
}
```

Simple For Loop- Block



Simple For Loop— Example

```
class ForLoopExample {  
    public static void main(String args[]){  
        for(int i=10; i>1; i--){  
            System.out.println("The value of i is: "+i);  
        }  
    }  
}
```

For loop example to iterate an array:

```
class ForLoopExample3 {  
    public static void main(String args[]){  
        int arr[]={2,11,45,9};  
        //i starts with 0 as array index starts with 0 too  
        for(int i=0; i<arr.length; i++){  
            System.out.println(arr[i]);  
        }  
    }  
}
```

For-each or Enhanced For Loop

Array va Collectionlar bilan ishlaganda For-each dan foydalangan qulayroq, chunki u yozishga qulay va tushunish uchun oson.

```
class ForEachExample1 {  
    public static void main(String args[]){  
        int arr[]={2,11,45,9};  
        for (int num : arr) {  
            System.out.println(num);  
        }  
    }  
}
```

```
class ForEachExample2 {  
    public static void main(String[] args) {  
        char[] vowels = {'a', 'e', 'i', 'o', 'u'};  
        for (char item : vowels) {  
            System.out.println(item)  
        }  
    }  
}
```

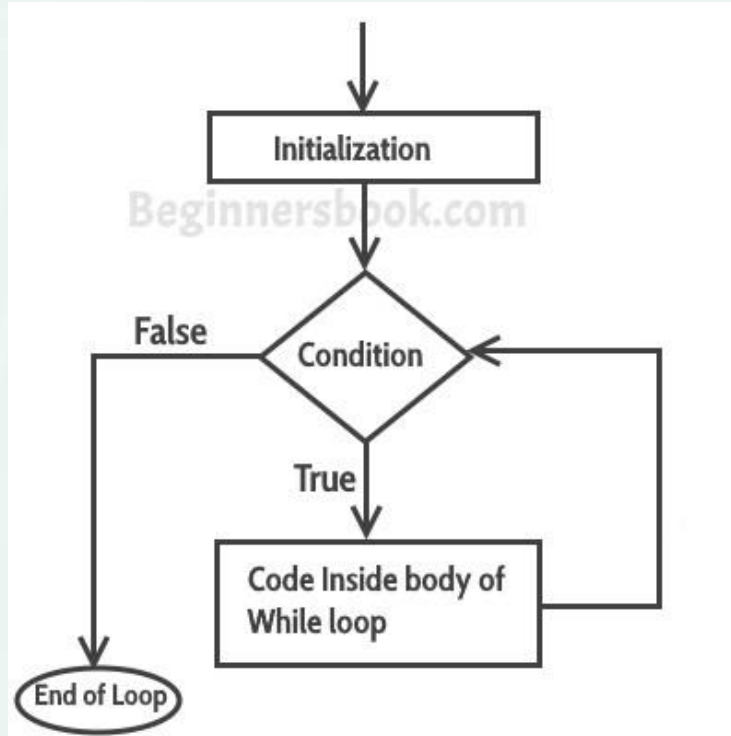


Labeled For Loop

```
public class LabeledBreakDemo {  
    public static void main(String[] args) {  
        int counter = 0;  
        start: {  
            for (int i = 0; i <= 10; i++) {  
                for (int j = 0; j <= 10; j++) {  
                    if (i == 5)  
                        break start;  
                }  
                counter++;  
            }  
        }  
        System.out.println(counter);  
    }  
}
```

```
public class LabeledContinueDemo {  
    public static void main(String[] args) {  
        start:  
        for (int i = 0; i < 5; i++) {  
            System.out.println();  
            for (int j = 0; j < 10; j++) {  
                System.out.print("#");  
                if (j >= i)  
                    continue start;  
            }  
            System.out.println("This will  
            never"+" be printed");  
        }  
    }  
}
```


While Loop



while loop example

```
public class Sample {  
    public static void main(String args[]) {  
        int n = 1;  
        int times = 5;  
        while (n <= times) {  
            System.out.println("Java while loops:" + n); n++;  
        }  
    }  
}
```

do-while loop example

```
class Sample {  
    public static void main(String args[]) {  
        int n = 1, times = 0; /* local variable Initialization*/  
        do { /* do-while loops execution */  
            System.out.println("Java do while loops:" + n);  
            n++;  
        } while (n <= times);  
    }  
}
```