Iteration Statements:

1. If we want to execute group of statements **repeatedly** or more number of times then we should go for iteration statements..

Three types of iteration statements present in Java.

They are

1)for
2)while
3)do while

for loop:

1. The **for loop** contains four parts **initialization**, **condition**, **increment/decrement** part and **statement**.

Syntax:

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

Initialization:

1. Each and every part is separated by **Semicolon** and It is **Mandatory**.
2. **Initialization part is optional.**
3. **Multiple Statements** at initialization but separate it by comma
4. Can Take only **single Initialization int i = 0, j =0; not multiple constants int i = 0, int j =0**

Conditional Part:

1. **conditional** part is optional.
2. If we are not taking any **condition** then compiler will place the **true** value.
3. condition must be **Boolean(true or false)**
4. cannot take **statement inside the conditional part**

for(initialization; condition; increment/decrement){
//statement or code to be executed
}

Increment/Decrement

1. Inside the **for loop increment/decrement** is optional.
2. In case of **increment, decrement** it is possible to take any number of **statements** and also each and every **statement** is separated by comma

While

1. A **while loop statement repeatedly executes** a target statement as long as a given condition is **true**.

Syntax:
while(condition) {
 // Statements
}

Do While

1. If we want to execute the loop body **at least one time** then we should go for **do while** statement.

Syntax:
```
do{
   //body
   }while(condition);
```

1. In the **do while** first body will be executed, then only the **condition** will be checked.
2. In **do while** the **while** must ends with **semicolon;** other wise we will get compilation error.
3. **do is taking the body** and **while is taking the condition** and the condition must be **boolean condition**
4. **In case of while loop current iterations will be performed** and **in do while loop next iteration is performed**