

# Looping Statement

Whenever we have to repeat certain statement several times is called loop.

## Advantages :-

1. Fast execution
2. Reusability
3. Decrease Line of Codes
4. Memory Space Less

## Types :-

1. while
2. do-while
3. for
4. for-each

## While-loop :-

It is a pre-test loop, it is used when we don't know the number of iterations in advance. It is also known as entry control loop.

```
while(condition) {  
    //code block to be executed  
}
```

## Do-While-loop :-

It is a post-test loop, it is used when we want to execute loop body at least once even condition is false. It is also known as exit control loop.

```
do{  
    //code block to be executed  
}  
while(condition)
```

### For-loop :-

It is the most commonly used loop, it is used when we want to perform initialization, condition, increment and decrement operation in single line.

```
for(initialization; condition; increment/decrement){  
    //code block to be executed  
}
```

### For-Each-loop :-

For-each loop mainly used to fetch the values from a collection like array.

```
for (type var : array)  
{  
    statements using var;  
}
```

## Nested-For-loop :-

A for loop which contains inside for loop is called nested for loop.

```
for(initialization; condition; increment/decrement) {  
    for(initialization; condition; increment/decrement) {  
        //code block to be executed  
    }  
    //code block to be executed  
}
```