

# Loops

Loops are used to repeat a block of code until the specified condition is completed. A loop statement allows us to execute a statement or group of statements multiple times without repetition of code.

## Types

- for loop
- while loop
- do-while loop

There are mainly two types of loops in C Programming:

1. Entry Controlled loops: In Entry controlled loops the test condition is checked before entering the main body of the loop. For Loop and While Loop is Entry-controlled loops.
2. Exit Controlled loops: In Exit controlled loops the test condition is evaluated at the end of the loop body. The loop body will execute at least once, irrespective of whether the condition is true or false. do-while Loop is Exit Controlled loop.

### for loop

```
for(initialisation; condition; updation) {  
    //do something  
}
```

### while loop

```
while(condition) {  
    //do something  
}
```

### do while Loop

```
do {  
    //do something  
} while(condition);
```

## Nested Loops

```
for(initialisation1; condition1; updation1 ) {  
    for(initialisation2; condition2; updation2 ) {  
        //do something  
    }  
}
```