

do-while loop

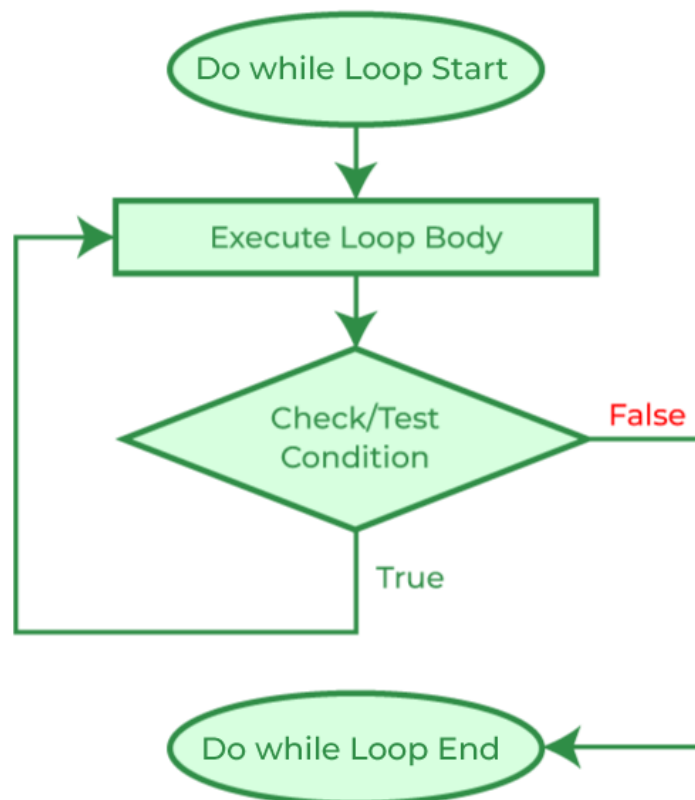
A do-while loop is similar to the while loop except that the condition is always executed after the body of a loop. It is also called an **exit-controlled loop**.

Syntax:

```
do  
{  
    statements;  
    Increment/decrement_of_loop_control_variable;  
} while (expression);
```

In the do-while loop, the body of a loop is always executed at least once. After the body is executed, then it checks the condition. If the condition is true, then it will again execute the body of a loop otherwise control is transferred out of the loop.

Flowchart:



Program:-

```
#include <stdio.h>
int main()
{
    double number, sum = 0;
    // the body of the loop is executed at least once
    do
    {
        printf("Enter a number: ");
        scanf("%lf", &number);
        sum += number;
    } while(number != 0.0);
    printf("Sum = %.2lf", sum);
    return 0;
}
```

Output:-

```
Enter a number: 25
Enter a number: 50
Enter a number: 15
Enter a number: 0
Sum = 90.00
```