

# Do...While Loop

(Count-Controlled Loop)

# Condition Controlled Loops: - Do..While and While Loops

## Do...while Loop (written in C#)

```
using System;

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public class Program
{
    public static void Main()
    {
        int j;
        j = 1;
        Console.WriteLine("j= " + j);
        Console.WriteLine("Hello - I am now going to enter the Do..while loop\n");
        do
        {
            Console.WriteLine("Hello - I am within the Do...While Loop");
            j = j+1;
            Console.WriteLine("j " + j + "\n");
        }
        while (j ==0);
        Console.WriteLine("Bye - I have just come out of the Do...While Loop");
        Console.WriteLine("j " + j + "\n");
    }
}
```

## Output

```
j= 1
Hello - I am now going to enter the Do..while loop

Hello - I am within the Do...While Loop
j 2

Bye - I have just come out of the Do...While Loop
j 2
```

In order to really understand these programs, you need to write and run them yourselves.

## While Loop (written in C#)

```
using System;

public class Program
{
    public static void Main()
    {
        int j = 1;
        Console.WriteLine(" j= " +j);
        Console.WriteLine(" I am going to try and enter the while loop");
        while (j == 0)
        {
            Console.WriteLine(j);
            j++;
        }
        Console.WriteLine(" j= " +j);
        Console.WriteLine(" I am out of the while loop");
    }
}
```

## Output

```
j= 1
I am going to try and enter the while loop
j= 1
I am out of the while loop
```

# Do..While and While Loops Compared

	<b>While</b>	<b>Do....While</b>
1	Condition is checked first then statement(s) is executed.	Statement(s) is executed at least once, thereafter condition is checked.
2	It might occur statement(s) is executed zero times, if condition is false.	At least once the statement(s) is executed.
3	while loop is entry controlled loop.	do-while loop is exit controlled loop.

## For, Do..While and While Loop - Question

In order to really understand these programs, you need to write and run them yourselves.

### What is the Output of these Programs? (written in C#)

#### Program 1 using a FOR loop

```
for (int i = 0; i < 5; i++)  
{  
    Console.WriteLine(i);  
}
```

#### Program 2 using a WHILE loop

```
int i = 1;  
while (i < 6)  
{  
    Console.WriteLine(i);  
    i++;  
}
```

#### Program 3 using a DO...WHILE Loop

```
int i = 1;  
do  
{  
    i++;  
    Console.WriteLine(i);  
}  
while (i < 6);
```

# For, Do..While and While Loop - Question & Answer

## What is the Output of these Programs?

In order to really understand these programs, you need to write and run them yourselves.

### Program 1

```
for (int i = 0; i < 5; i++)  
{  
    Console.WriteLine(i);  
}
```

### Output

0  
1  
2  
3  
4

### Program 2

```
int i = 1;  
while (i < 6)  
{  
    Console.WriteLine(i);  
    i++;  
}
```

### Output

1  
2  
3  
4  
5

### Program 3

```
int i = 1;  
do  
{  
    i++;  
    Console.WriteLine(i);  
}  
while (i < 6);
```

### Output

2  
3  
4  
5  
6

**That's all for now folks!!**