Do-while Loop

This lesson introduces the concept of do-while loop in C# using an example

Introduction

The **do...while** loop is nearly identical to the `while` loop, but instead of checking the *conditional* statement before the loop starts, the **do...while** loop checks the *conditional* statement **after** the *first* run, then continuing onto another iteration. This results in executing the loops at least **once**.

Syntax

The *syntax* is as follows:

```
do
{
  /// do something
} while(condition) /// loop while the condition satisfies
```

Do-while Syntax

As you can see, it will run the loop **at least** once before checking the conditional.

> **Note:** The **do...while** loop is still haunted by *infinite* loops, so exercise the same caution with the **do...while** loop as you would with the `while` loop. Its usefulness is much more limited than the `while` loop, so use this only when necessary.
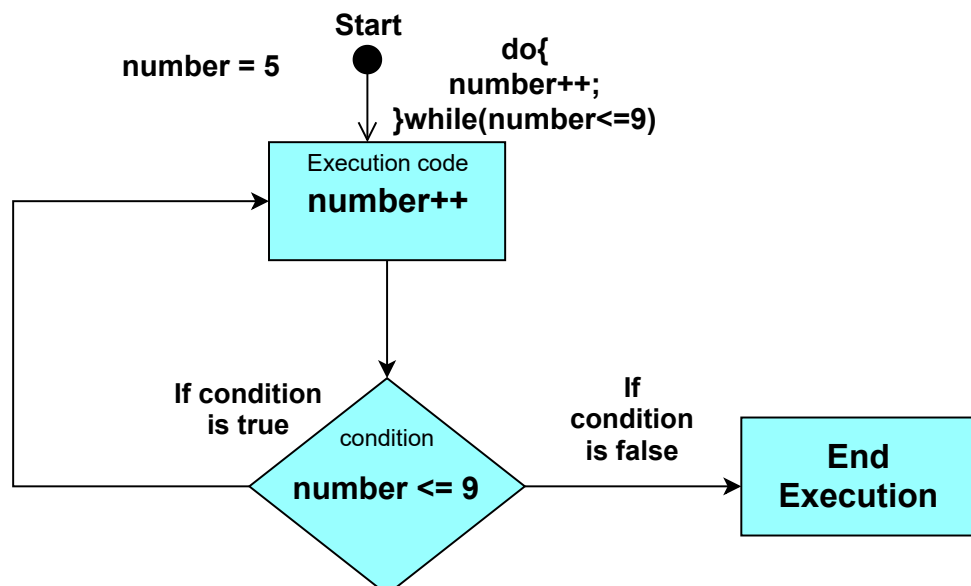
Below is an example showing how to implement the **do...while** loop in **C#**.

```csharp
class DoWhileExample
{
    static void Main()
    {
        int number=5;
        do {
            System.Console.WriteLine("Value of number is: {0}",number);
            number++;
        } while(number<=9);    // the contition is being checked after the first run
    }
}
```

Do-While Example

Below is an *illustration* of the code above to help you better understand the logic.

Flow Chart For Do While Loop Code

When is do-while used?

A *do-while* loop is used where your loop should execute **at least one** time.

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For example, let's consider a scenario where we want to take an *integer* input from the user until the user has entered a **positive** number. In this case, we will use a **do-while** as we have to run loop **at-least once** because we want input from user at-least once. This loop will continue running until the user enters a **positive** number.

That's all the major stuff you needed to know about the workings of `while` and **do...while** loops in C#. Let's learn about `for` loops in the next lesson.