

C# - While Loop

A **while** loop statement in C# repeatedly executes a target statement as long as a given condition is true.

Syntax

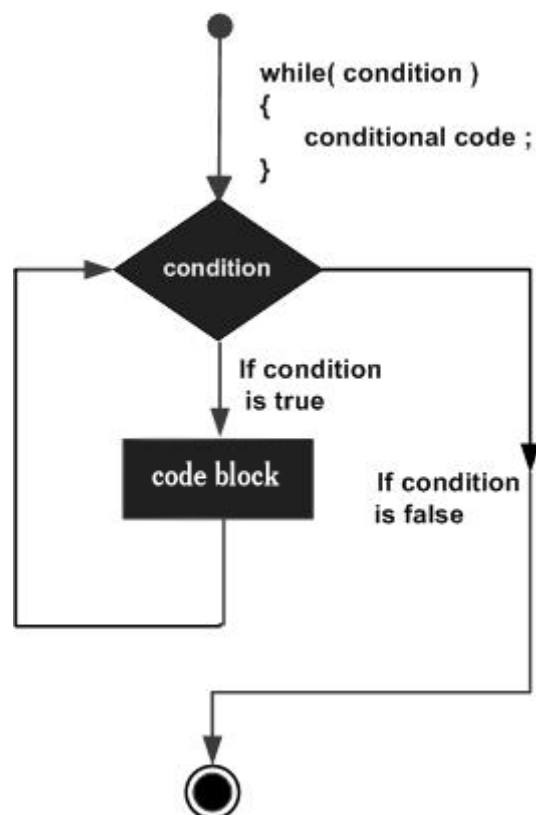
The syntax of a **while** loop in C# is –

```
while(condition) {  
    statement(s);  
}
```

Here, **statement(s)** may be a single statement or a block of statements. The **condition** may be any expression, and true is any non-zero value. The loop iterates while the condition is true.

When the condition becomes false, program control passes to the line immediately following the loop.

Flow Diagram



Here, key point of the *while* loop is that the loop might not ever run. When the condition is tested and the result is false, the loop body is skipped and the first statement after the while loop is executed.

Example

```
using System;

namespace Loops {
    class Program {
        static void Main(string[] args) {
            /* Local variable definition */
            int a = 10;

            /* while loop execution */
            while (a < 20) {
                Console.WriteLine("value of a: {0}", a);
                a++;
            }
            Console.ReadLine();
        }
    }
}
```

When the above code is compiled and executed, it produces the following result –

```
value of a: 10
value of a: 11
value of a: 12
value of a: 13
value of a: 14
value of a: 15
value of a: 16
value of a: 17
value of a: 18
value of a: 19
```