

# [1430] Unsafe Code

Unsafe code is C# code that can use un-managed, "dangerous" programming features - i.e. pointers.

```
using System;

namespace UnsafeAtAnySpeed
{
    class Program
    {
        static void Main(string[] args)
        {
            string message = "Why if it isn't my good friend, GPF!";

            Console.WriteLine("Unsafe Code Demo:");
            Console.WriteLine("=====");

            unsafe
            {
                fixed (char* msg = message)
                {
                    char* p = msg;
                    while (*p != 0)    // Use "while (true)" to see a GPF (eventually)
                        Console.WriteLine(*p++);
                }
            }
            Console.ReadLine();
        }
    }
}
```

*Note: You need to check the "Unsafe Code" checkbox in your Project settings to compile this code in Visual Studio.*

"GPF" stands for "General Protection Fault". It is a CPU generated exception that happens when your code tried to access a part of the computer's memory that it doesn't own. GPF's used to result in the "Blue Screen of Death" in earlier versions of Windows.

Unsafe code is rarely needed these days. Only if you are dealing with very old, legacy code.