C# - MISCELLANEOUS OPERATORS

There are few other important operators including **sizeof** and **? :** supported by C#.

Operator	Description	Example
sizeof	Returns the size of a data type.	sizeof*int*, returns 4.
typeof	Returns the type of a class.	typeof*StreamReader*;
&	Returns the address of an variable.	&a; returns actual address of the variable.
*	Pointer to a variable.	*a; creates pointer named 'a' to a variable.
? :	Conditional Expression	If Condition is true ? Then value X : Otherwise value Y
is	Determines whether an object is of a certain type.	If*Ford*is*Car* // checks if Ford is an object of the Car class.
as	Cast without raising an exception if the cast fails.	Object obj = new StringReader " *Hello* " ;
		StringReader r = obj as StringReader;

Example

```csharp
using System;
namespace OperatorsAppl
{
    class Program
    {
        static void Main(string[] args)
        {
            /* example of sizeof operator */
            Console.WriteLine("The size of int is {0}", sizeof(int));
            Console.WriteLine("The size of short is {0}", sizeof(short));
            Console.WriteLine("The size of double is {0}", sizeof(double));

            /* example of ternary operator */
            int a, b;
            a = 10;
            b = (a == 1) ? 20 : 30;
            Console.WriteLine("Value of b is {0}", b);

            b = (a == 10) ? 20 : 30;
            Console.WriteLine("Value of b is {0}", b);
            Console.ReadLine();
        }
    }
}
```

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

```
The size of int is 4
The size of short is 2
The size of double is 8
```

```
Value of b is 30
Value of b is 20
```

```
Value of b is 30
Value of b is 20
```