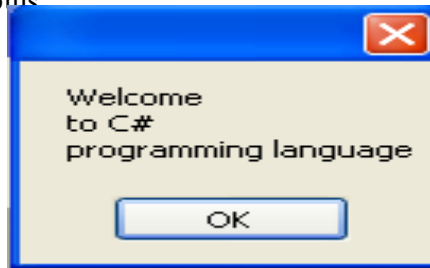


```
private void button1_Click(object sender, EventArgs e)
{
    MessageBox.Show("Welcome\nto C# \nprogramming
language");
}
```

Its outputs:



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1.4 Data Types

- Primitive data types
 - Data types that are built into C#
 - String, Int, Double, Char, Long
 - Each data type name is a C# keyword
 - Same type variables can be declared on separate lines or on one line

```
int m;
double x, y;
```

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| Category | Bits | Type | Range/Precision |
|-------------------|------|---------|--|
| Signed integral | 8 | sbyte | -128 ... 127 |
| | 16 | short | - 32,768 ... 32,767 |
| | 32 | Int | - 2,147,483,648 ... 2,147,483,647 |
| | 64 | long | -9,223,372,036,854,775,808 ... 9,223,372,036,854,775,807 |
| Unsigned integral | 8 | byte | 0 ... 255 |
| | 16 | ushort | 0 ... 65,535 |
| | 32 | uint | 0 ... 4,294,967,295 |
| | 64 | ulong | 0 ... 18,446,744,073,709,551,615 |
| Floating point | 32 | float | 1.5×10^{-45} to 3.4×10^{38} , 7-digit precision |
| | 64 | double | 5.0×10^{-324} to 1.7×10^{308} , 15-digit precision |
| Decimal | 128 | decimal | 1.0×10^{-28} to 7.9×10^{28} , 28-digit precision |
| Boolean | 16 | bool | True or False |

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1.5 Memory Concepts

- **Memory locations**
 - Each variable is a memory location
 - Contains name, type, size and value
 - When a new value is enter the old value is lost
 - Used variables maintain their data after use
- **Declare memory locations (variables)**
 - Declare single variable


```
int number
double salary=100;
```
 - Declare several variable


```
double balance=100,rate=0.08;
int n=6,m=5;
```

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