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Question 1

In [45]:

```
var a = 5;
var b = 5.0;
var c = 5 > 1;
var d = '5';
var e = 5 * 2;
var f = '5' * 2;
var g = '5' + '2';
var h = 5 / 2;
var i = 5 % 2;
var j = new[] {5, 2, 1};
var k = 5 == 3;
var l = Math.PI;
```

In [58]:

```
Console.WriteLine("Eqn: a = 5, Ans: {0}, Evaluation: {1}", a.GetType(), a );
Console.WriteLine("Eqn: b = 5.0, Ans: {0}, Evaluation: {1}", b.GetType(), b );
Console.WriteLine("Eqn: c = 5 > 1, Ans: {0}, Evaluation: {1}", c.GetType(), c );
Console.WriteLine("Eqn: d = '5', Ans: {0}, Evaluation: {1}", d.GetType(), d );
Console.WriteLine("Eqn: e = 5 * 2, Ans: {0}, Evaluation: {1}", e.GetType(), e );
Console.WriteLine("Eqn: f = '5' * 2, Ans: {0}, Evaluation: {1}", f.GetType(), f );
Console.WriteLine("Eqn: g = '5' + '2', Ans: {0}, Evaluation: {1}", g.GetType(), g );
Console.WriteLine("Eqn: h = 5 / 2, Ans: {0}, Evaluation: {1}", h.GetType(), h );
Console.WriteLine("Eqn: i = 5 % 2, Ans: {0}, Evaluation: {1}", i.GetType(), i );
Console.WriteLine("Eqn: j = new[] {{5, 2, 1}}, Ans: {0}, Evaluation: {1}", j.GetType(),
Console.WriteLine("Eqn: k = 5 == 3, Ans: {0}, Evaluation: {1}", k.GetType(), k );
Console.WriteLine("Eqn: l = Math.PI, Ans: {0}, Evaluation: {1}", l.GetType(), l );
```

```
Eqn: a = 5, Ans: System.Int32, Evaluation: 5
Eqn: b = 5.0, Ans: System.Double, Evaluation: 5
Eqn: c = 5 > 1, Ans: System.Boolean, Evaluation: True
Eqn: d = '5', Ans: System.Char, Evaluation: 5
Eqn: e = 5 * 2, Ans: System.Int32, Evaluation: 10
Eqn: f = '5' * 2, Ans: System.Int32, Evaluation: 106
Eqn: g = '5' + '2', Ans: System.Int32, Evaluation: 103
Eqn: h = 5 / 2, Ans: System.Int32, Evaluation: 2
Eqn: i = 5 % 2, Ans: System.Int32, Evaluation: 1
Eqn: j = new[] {5, 2, 1}, Ans: System.Int32[], Evaluation: System.Int32[]
Eqn: k = 5 == 3, Ans: System.Boolean, Evaluation: False
Eqn: l = Math.PI, Ans: System.Double, Evaluation: 3.141592653589793
```

Question 2

In [69]:

```
var q2a = "Supercalifragilisticexpialidocious";
Console.WriteLine("The length of 'Supercalifragilisticexpialidocious' is {0} characters
```

The length of 'Supercalifragilisticexpialidocious' is 34 characters.

In [71]:

```
Console.WriteLine("'Supercalifragilisticexpialidocious' contains 'ice': {0}", q2a.Conta
```

'Supercalifragilisticexpialidocious' contains 'ice': True

In [91]:

```
string[] ListOfString = {
    "Supercalifragilisticexpialidocious",
    "Honorificabilitudinitatibus",
    "Bababadalgharaghtakamminarronnkonn"
};

int maxL = 0;
string maxS = "";
for(int _ = 0; _ < ListOfString.Length; _++){
    if(ListOfString[_].Length > maxL){
        maxL = ListOfString[_].Length;
        maxS = ListOfString[_];
    }
}
Console.WriteLine("The string with maximum length={0} is '{1}'", maxL, maxS )
```

The string with maximum length=34 is 'Supercalifragilisticexpialidocious'

In [95]:

```
string[] values = {"Berlioz", "Borodin", "Brian", "Bartok", "Bellini", "Buxtehude", "B"}
Array.Sort(values);
Console.WriteLine("The first value in a \ndictionary = {'Berlioz', 'Borodin', 'Brian',
```

The first value in a
dictionary = {'Berlioz', 'Borodin', 'Brian', 'Bartok', 'Bellini', 'Buxtehude', 'Bernstei
n'}
is 'Bartok'.

Question 3

In [116...

```
public void triangleArea(int a, int b, int c)
{
    double s = (a+b+c)/2.0;
    double result = Math.Sqrt(s*(s-a)*(s-b)*(s-c));
    Console.WriteLine(result);
}
int a,b,c;
Console.WriteLine("Enter side a");
a = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("Enter side b");
b = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("Enter side c");
c = Convert.ToInt32(Console.ReadLine());

triangleArea(a,b,c);
```

Enter side a
Enter side b
Enter side c
0

In []: