

```
1 //using is a directive
2 //System is a namespace, namespace groups related features together
3 //System is needed so we can use Console, classes
4 using static System.Console;
5 //outermost level of grouping
6 class Program
7 {
8     //this method is accessible only here
9     //it's static, so call it by name directly
10    //void means does not return a value with return keyword
11    //out parameters allow us to set multiple values and have them
12    //accessible inside the CALLING code
13    private static void Summarize(double[] arr, out double average, out double sum)
14    {
15        double tempSum = 0;
16
17        foreach (var d in arr)
18            tempSum += d;
19
20        sum = tempSum;//set the value of the sum
21        average = tempSum / arr.Length;//set the value of the average
22    }
23    //Main is a method
24    //this is the entry point into program
25    static void Main()
26    {
27        double[] arr = new double[] { 1, 2, 3 };//array of values to summarize
28        double outAverage, outSum;//declare two our variables
29        Summarize(arr, out outAverage, out outSum);//actually call Summarize
30        //now the variable values can actually be displayed in a string
31        WriteLine($"Sum={outSum}, and the average is {outAverage}");
32    }
33 }
34 }
35
36
```