

```
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 { //public means accessible anywhere
8     //static means we can call it just by wiring SumArray(argument)
9     //double is the return type
10    //name is SumArray
11    //parameter is an array of type double
12    public static double SumArray(double[] arr)
13    {
14        double sum = 0; //declare and set sum to be 0
15        foreach(var d in arr) //use this loop to iterate over the values
16        {
17            sum += d; //accumulate the sum inside the variable called sum
18        }
19        return sum; //send the sum back to the calling code
20    }
21    //Main is a method
22    //this is the entry point into program
23    static void Main()
24    {
25        double[] myValues = new double[] { 1, 2, 3 };
26        //make array of values
27        //line below calls SumArray(myValues) and gets back a double
28        //this value is then spliced into the string
29        //and the result is displayed to the user
30        WriteLine($"The sum of the values is {SumArray(myValues)}");
31    }
32 }
33
34
```