

CS 1400 Lab #22: Returning Two Values

Introduction

Some problems require a method to give more than one value back to the calling method. The problem is that the return mechanism in C# only allows you to return one thing. In this lab you will use reference parameters to solve this problem. Recall that when a value is passed by reference, the reference passed to the method points to where the actual data value is stored within the calling method's frame of reference. This allows the called method to change the value of that data directly, so it does not have to return it as would normally be the case.

The problem

In this lab you will design a method that takes a double value representing some amount of money in dollars and cents, for example \$4.53, and splits this value into two integers. The first integer will contain the dollar part of that figure (in this example that would be 4) and the second integer value will contain the cents part (in this example that would be 53).

Then write a program that asks the user for some amount of money. The program will call the method that you designed to split the value up into the dollar part and the cents part. The program will output the dollar part and the cents part like this:

```
There are 4 dollars and 53 cents in $4.53.
```

The program must be written so that the method `Main()` does all of the interaction with the user. The method that you design cannot do any input or output.

A sample executable file can be found [here](#).

File(s) to Submit:

Place the complete project folder in a zip file and name the zip file `lab_22_your-initials_V1.0.zip`. For example, I would name my file `lab_22_RKD_V1.0.zip`. Submit this assignment as Lab #22 on Canvas.

Grading Guidelines

Description	Points possible
Assignment meets grading guidelines: o Source code files contain a declaration that you did not copy any code, except that provided. o Assignment has been properly submitted to Canvas o Code meets style guidelines o Code contains a Console.ReadLine() statement at the end	2
Program passes parameters correctly	1
Program executes correctly and meets all requirements	2
Total	5