# PE9 – Functions

**Due Tuesday 8-Sep-2020 by 11:59pm**

1. The following two functions have errors. What are they?

static bool Write()

{

Console.WriteLine("Text output from function.");

}

**-> does not return a boolean**

static void myFunction(string label, params int[] args,

bool showLabel)

{

if (showLabel)

{

Console.WriteLine(label);

}

foreach (int i in args)

{

Console.WriteLine("{0}", i);

}

}

**-> the “params” parameter has to be the last parameter**

1. Add a timer to the Math Quiz Solution in "Lecture Code Examples" to elapse in 5 seconds for each question, and mark the answer wrong if the timer expires.

GitHub project URL: <https://github.com/nihalkarim/myIGME-201/blob/main/p9/q2-timedMathQuiz/q2-timedMathQuiz/Program.cs>

1. Create a delegate function and use it to impersonate the Console.ReadLine() function when asking for user input. Refer to the "Lecture Code Examples" for the 3 steps in defining a delegate function. The signature of Console.ReadLine() is "string ReadLine()" (ie. it returns a string and accepts no parameters).

GitHub project URL: <https://github.com/nihalkarim/myIGME-201/blob/main/p9/q3-readLineDelegate/q3-readLineDelegate/Program.cs>

1. Modify the following struct to include a function that returns the total price of an order, where the total price is unitCount \* unitCost:

struct order

{

public string itemName;

public int unitCount;

public double unitCost;

public double TotalPrice()

{

double total = this.unitCount \* this.unitCost;

return total;

}

}

1. Add another function to the order struct that returns a formatted string as follows, where italic entries enclosed in angle brackets are replaced by appropriate values:

Order Information: <*unit count*> <*item name*> items at $<*unit cost*> each, total cost $<*total cost*>

public string PriceFormat()

{

return "Order Information: " + this.unitCount + " \'" + this.itemName + "\' items at $" + this.unitCost + " each, total cost $" + this.TotalPrice() + ".";

}

## Submission

Upload this completed document to the corresponding MyCourses dropbox.

Add, Commit and Push the projects for #2 and #3