CSE 1321L: Programming and Problem Solving I Lab

Lab 2

Getting Started with Coding

For each lab program you develop, make sure to include the following header - **replace the dots with your section number, semester, your full name, your instructor's name, and lab number:**

```
      Class:   CSE 1321L
      Section:        ...
      Term:           ...
      Instructor:     ...
      Name:           ...
      Lab#:           ...
```

Make sure to put the correct comment characters before the above lines in each file. C# & Java use // for comments.

Lab2A: MadLibs. Several years ago, parents would buy their kids a copy of MadLibs before going on a long car trip. Basically, one person would ask another to provide a name, an adverb, an adjective, a number, and so on. The responses would then get plugged into a pre-written script, and the results would be bizarrely funny. For this assignment, we're going to code a short version of that. Your program should behave like the following code. User input is denoted in **bold**. Both the class and filename should be called Lab2A (.java, .cs, .cpp).

Sample run:

```
Enter a name: Tiffany
Enter another name: Bubba
Enter a verb: eat
Enter an adverb: wickedly
Once upon a time, there was a person named Tiffany who had a child named
Bubba. This child would eat wickedly while singing to strangers.
```

Lab2B: Design and implement a program to print out the following shape using stars (SHIFT-8) and underscores (SHIFT-minus). Both the class and filename should be called Lab2B (.java, .cs, .cpp).

Sample run:

```
   *
___ ___
  * *
__ _ __
 * * *
_ _ _ _
* * * *
 _ _ _
 * * *
_ _ _ _
  * *
__ _ __
   *
___ ___
```

Lab2C: Design and implement a program that will read in a width and height from the user and then calculate and display the *area* and *perimeter* of a rectangle. Format the outputs following this sample run. User input is in **bold**. Both the class and filename should be called Lab2C (.java, .cs, .cpp).

Sample run:

```
Enter a width: 4
Enter a height: 8
The area is 32
The perimeter is 24
```

Instructions:

1. Programs must be working correctly.
2. Programs must be called the correct file name
3. If working in Java or C#, class names must be correct.
4. Programs must be completed and checked before working the assignment.
5. Programs must be checked by the end of the designated lab session.
6. Programs (source code files) must be uploaded to Gradescope by due date.