CS 1400 Lab #20: Making a Dice Game

Objectives:

The objective of this lab is to help you understand how to write code that validates input, and uses loops together with branches and random numbers. You designed a solution to this problem in the last lab.

The problem

For this assignment, you will be writing a program that simulates rolling a pair of dice. Your program will perform the following steps:

- 1. Create a Random Number generator object.
- 2. Ask the user if they want to roll the dice
- 3. Get the user's response and validate that it is either 'y' or 'n'. If it is not a 'y' or an 'n', tell the user that the input is invalid and ask for another response.
- 4. If the user responds with a 'y' then
 - a. Generate two random numbers in the range 1 6
 - b. If the two numbers are 6 and 6, display the message "You rolled boxcars"
 - c. If the two numbers are 1 and 1 display the message "You rolled snake-eyes"
 - d. In all other cases display the message "You rolled ..." and show the values of the two random numbers
 - e. Return to step 2 and ask the user again if they want to roll the dice.
- 5. If the user responds with a 'n', print a goodbye message and quit.

Deriving the Solution

You should have developed the design for this program in lab #19.

Writing the Code

Start Visual Studio and open the project you created for lab #19. Now, fill in the C# code that will implement the pseudo-code that you wrote in lab #19. Notice how your pseudo-code now serves as documentation for your code. It makes it easier for others to understand how your program works.

File(s) to Submit:

Place your complete project folder in a zip file and name the zip file lab_20_your-initials_V1.o.zip. For example, I would name my file lab_20_RKD_V1.o.zip. Submit this assignment as Lab #20 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 o Your program is adequately documented	2
Your program works and meets all requirements.	3
Total	5