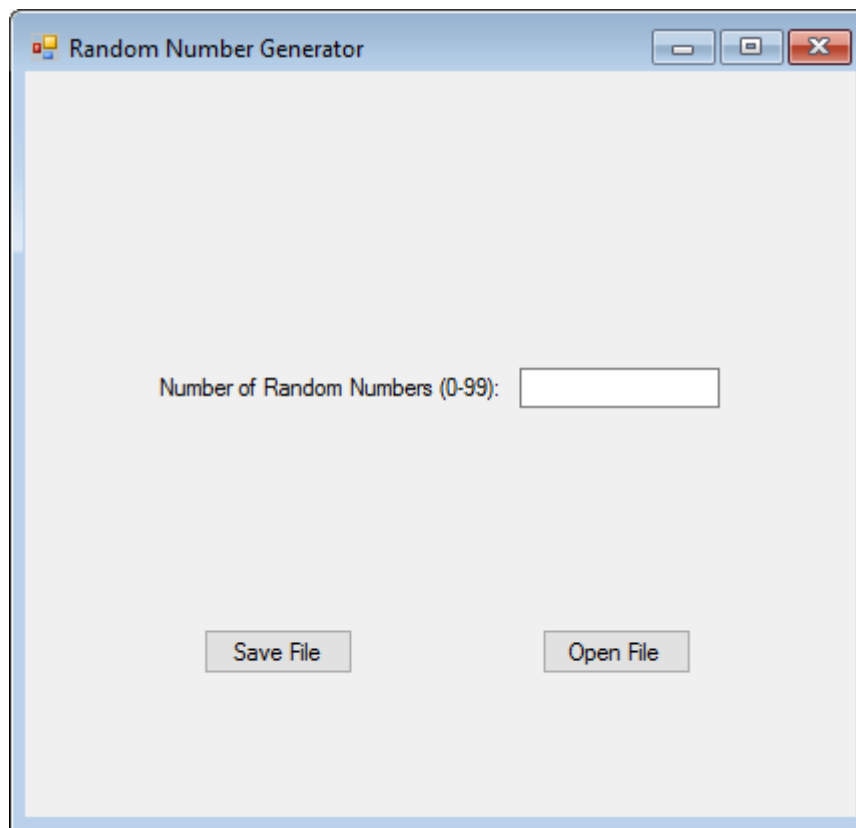**CIS 366 Introduction to .NET Development using C# (Spring 2019)**

Assignment 5

Requirement

This assignment is to design a windows application to generate random numbers between 0 – 99 and store them into a text file. It also allows users to read those numbers back to the program and count the number of random numbers in each range (0-19, 20-39, 40-59, 60-79, and 80-99). In this assignment, you will use Visual Studio 2015 and write C# code for following functionalities:
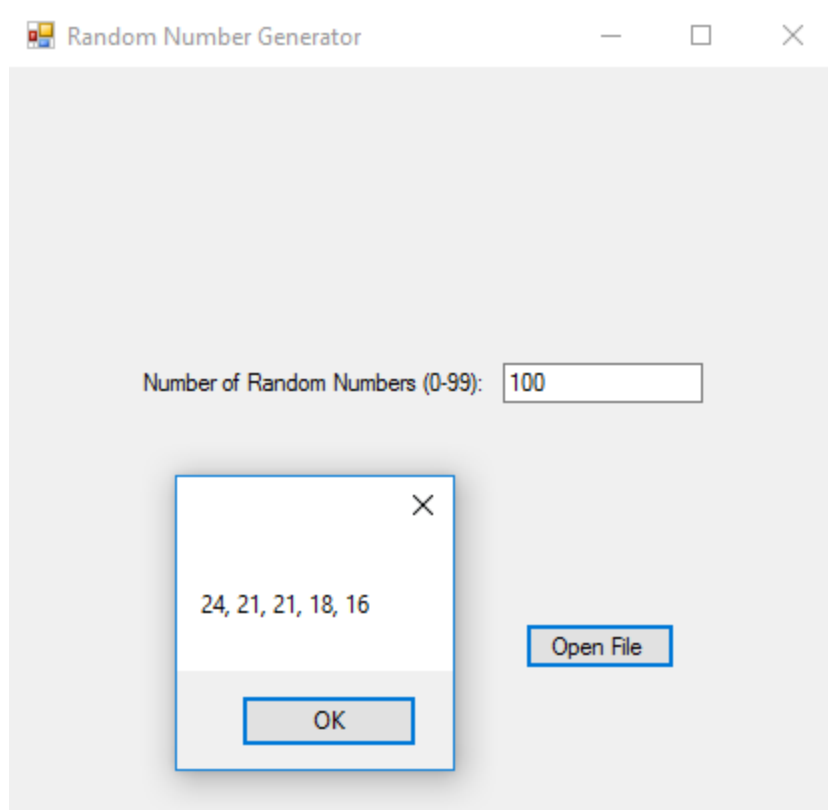
1. Build a user interface that looks like this. It allows users to enter the number of random numbers (0-99) needed.

2. Place a "Save File" button to trigger the action of creating a text file using a *SaveFileDialog* control. When clicked, create a text tile with a user-specified name and store it under a user-specified directory. **Then generate X random numbers in the range of 0-99, X is to be entered by the user in the text box.**

3. Place an "Open File" button to trigger the action of reading a text file using an *OpenFileDialog* control. When clicked, read the text file selected by the user in the pop up window. Define variables *zeroToNineteen*, *twentyToThirtyNine*, *fourtyToFiftyNine*, *SixtyToSeventyNine*, and *EightyToNinetyNine* to store the number of random numbers read from the opened text file that are in each corresponding range. Calculate the number of random numbers in each category and show them in a message box.

Your output may look like this:

In this example, 100 random numbers (in the range of 0-99) were generated. Among them, 24 of them are in the range of 0-19, 21 of them are in the range of 20-39, 21 of them are in the range of 40-59, 18 of them are in the range of 60-79, and 16 of them are in the range of 80-99.

Submission

Zip your ENTIRE project folder and name your zipped file to (yourlastname)_a5. Submit your zipped file to the Blackboard dropbox as an attachment.