Stacks

Objective: After completion of this lab, you will be able to

- identify basic operations of stacks in C++.

Lab Exercise

(a) Download **Stack.h**, **Stack.cpp**, and **Sample_Stack_tester.cpp** from iLearn

Make a project with the three files. Then, modify the programs so that the program can read a sequence of characters and reverse it using the stack. The output of your program should look as follows:

```
Enter a string => CSUMB
You entered CSUMB
Reverse is BMUSC
```

Note that the Sample_Stack_tester.cpp is provided only as a sample. You need to modify it as per your needs.

(b) Download **Stack.h**, **Stack.cpp**, and **Sample_Stack_tester.cpp** from iLearn.

Make a project with the three files. Then, modify the programs so that the program can convert a positive integer to a binary representation. The output of your program should look as follows:

```
Enter a number: 5
Decimal: 5
Binary: 101
```

This is another sample execution:

```
Enter a number: 26
Decimal: 26
Binary: 11010
```

Grading

I will download your code on my computer and execute it. If your code does not compile, you may lose more than 50% of your points (based on my discretion). If your code compiles, but still produces incorrect results you may still lose more than 30% of your points (based on my discretion).

You are expected to provide code which will execute on Visual Studio and display the output.

Your code should have the following characteristics for you to get full points on the assignment

1. Compile without error.
2. Produce correct output.

3. Good programming structure.
4. Comments. (Title, Abstract, Author, ID, and Date are mandatory.)
5. Meaningful and related variable names.

What to turn in?

Submit your source programs **and 'HomeworkSubmission_yourlastname.pdf' as a single zipped file** on iLearn.

If you do not submit the above mentioned documents in the format specified your assignment will not be graded.

Homework Submission_yourlastname.pdf
For each homework problem, you are expected to submit screenshots of the results obtained from running your code. You should also explain what each screenshot means and why the result on the screenshot is correct.

This link explains how to take screenshots in Mac and Windows.
http://www.take-a-screenshot.org/