LAB 2 REQUIREMENTS
50 points -individual effort

Place the following disclaimer at the beginning of each java file.

/* LAB #

***FALL 2013**

***STUDENT'S FIRST NAME, LAST NAME**

*** Following program is my own effort/work.**

***I did not copy this program or program segment from anyone or any website site. If proven otherwise I will accept the consequences and the actions that will be taken for cheating in this class.**

***/**

Problem 1: Reverse Characters Words [15 points]

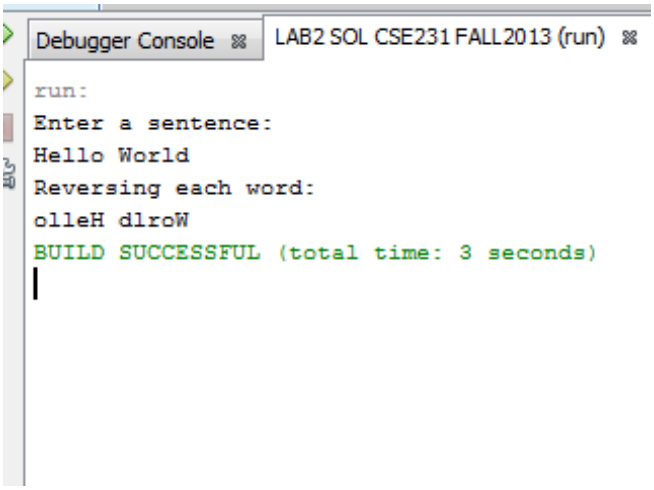
Design and implement an application named as **ReverseCharacters** that reads a sentence from the user and prints the sentence with the characters of each word backwards.

You must use a stack to reverse the characters of each word.

Use the package provided for you with these requirements to complete this work.

- Document if there is any pre or post conditions for your method(s).
- Include data validation of some form in your code.

Sample Run:



Problem 2: Reverse Words [10 points]

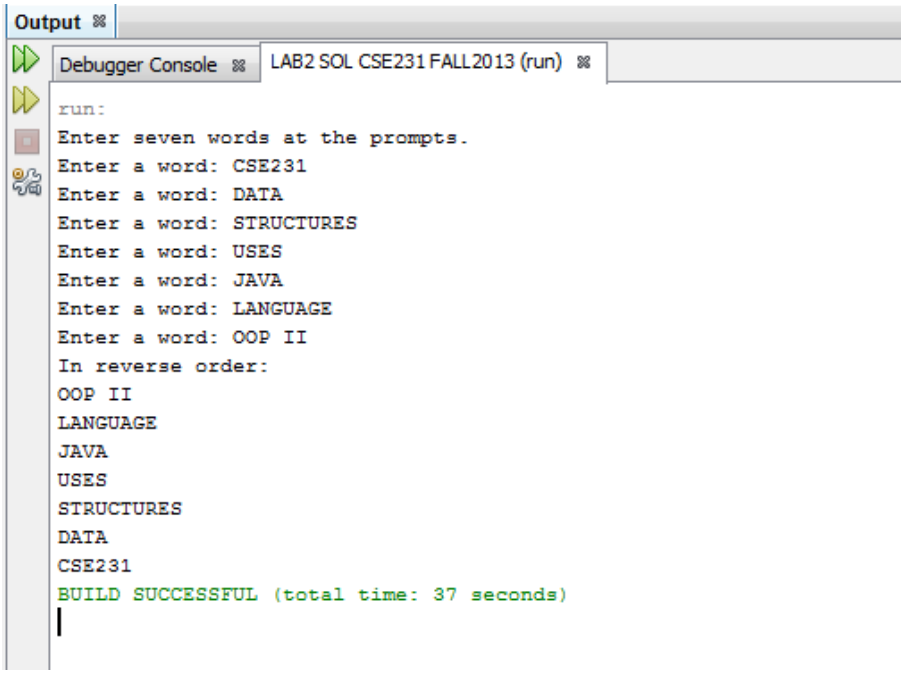
Implement a class called **ReverseWords** that uses a stack to output a set of elements input by the user in reverse order.

You must use a stack to reverse the characters of each word.

Use the package provided for you with these requirements to complete this work.

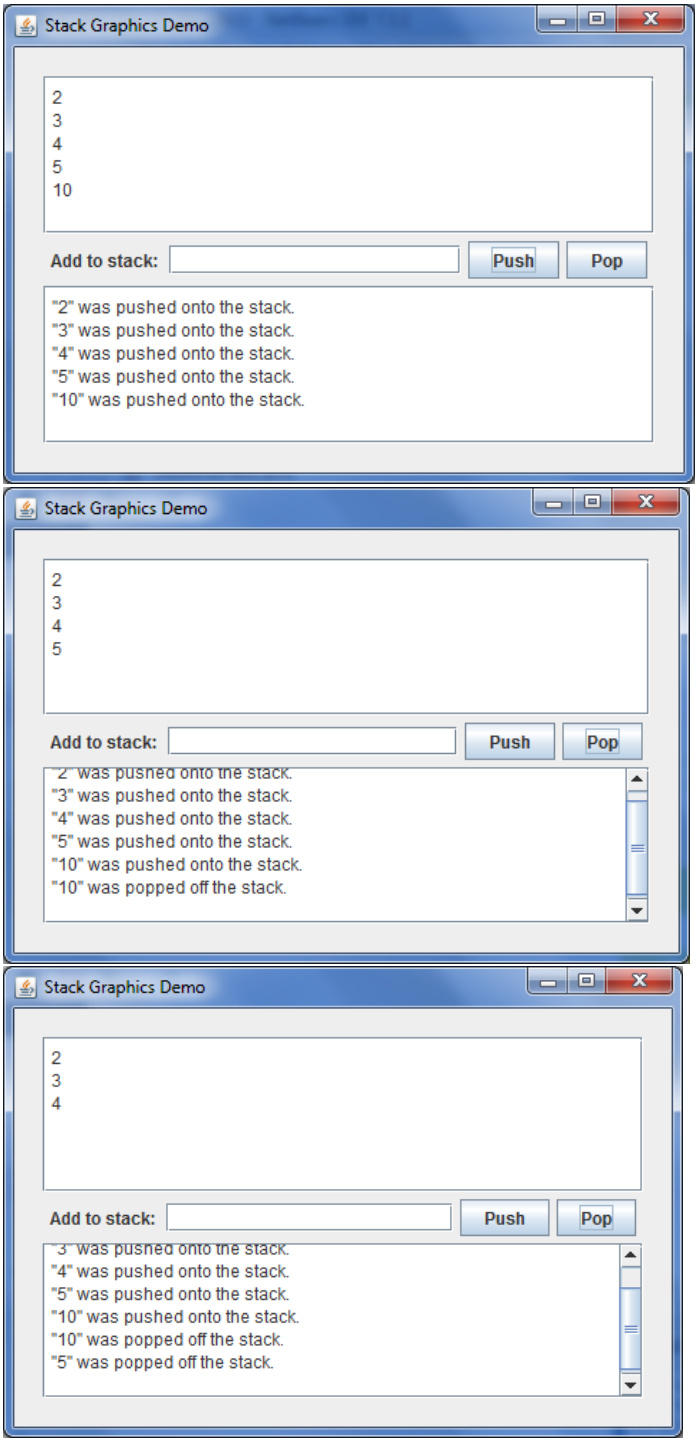
- Document if there is any pre or post conditions for your method(s).
- Include data validation of some form in your code.

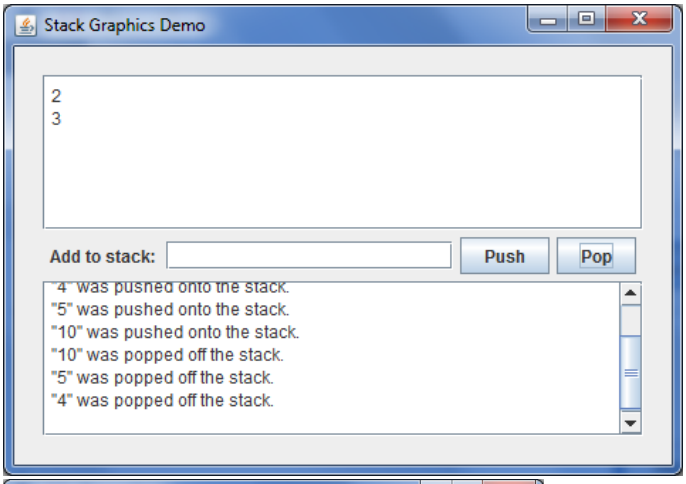
Sample Run:

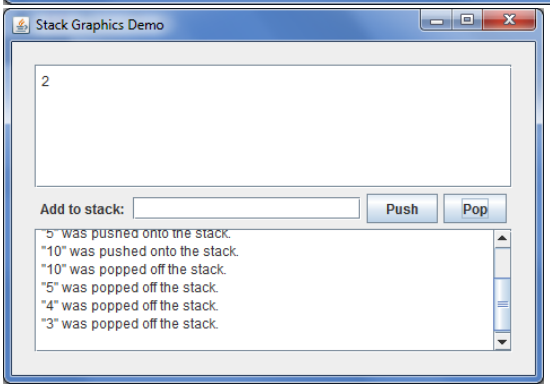


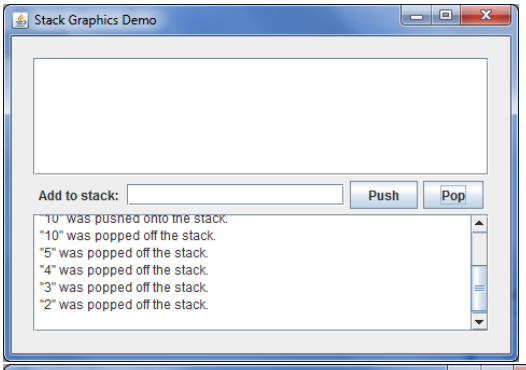
PROBLEM 3 [25 points]

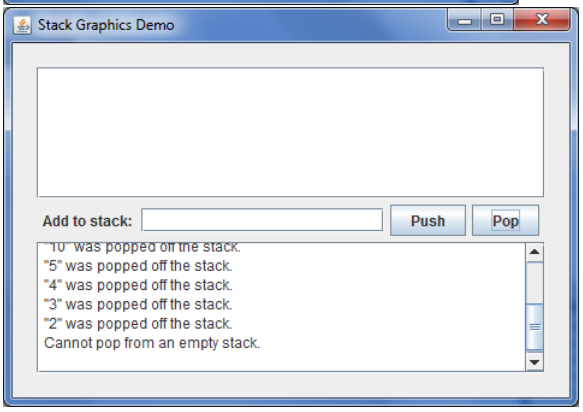
Create a graphical application **StackDemoGUI** that provides a button for push and pop from a stack, a text field to accept a string as input for push, and a text area to display the contents of the stack after each operation.




Stack Graphics Demo
2
3
Add to stack:
Push
Pop
"4" was pushed onto the stack.
"5" was pushed onto the stack.
"10" was pushed onto the stack.
"10" was popped off the stack.
"5" was popped off the stack.
"4" was popped off the stack.


Stack Graphics Demo
2
Add to stack:
Push
Pop
"5" was pushed onto the stack.
"10" was pushed onto the stack.
"10" was popped off the stack.
"5" was popped off the stack.
"4" was popped off the stack.
"3" was popped off the stack.


Stack Graphics Demo
Add to stack:
Push
Pop
"10" was pushed onto the stack.
"10" was popped off the stack.
"5" was popped off the stack.
"4" was popped off the stack.
"3" was popped off the stack.
"2" was popped off the stack.


Stack Graphics Demo
Add to stack:
Push
Pop
"10" was popped off the stack.
"5" was popped off the stack.
"4" was popped off the stack.
"3" was popped off the stack.
"2" was popped off the stack.
Cannot pop from an empty stack.

- Document if there is any pre or post conditions for your method(s).
- Include data validation of some form in your code.

SUBMISSION:

Please upload the following .java files under Lab2 folder:

ReverseCharacters.java

ReverseWords.java

StackDemoGUI.java

Zip the folder and upload through Moodle.

INTERVIEW:

The interview is 40% of your lab 2 grade. Come to class be prepared and ready you explain your code.

Also you will be tested on executing your work on command line, make sure to go over the steps on how to execute your work on command line.