Stacks Lab

# Part 1

1. Download Stacks lab instructions from e-learning portal
2. Download StackX.java class from the e-learning portal.
3. Create a new Netbeans project for the lab on Stacks
4. Add the StackX class to the project
5. Create a test class for the stack class. Call it StackTest.java. It should have a main method.
6. Create an instance of the of the StackX class. The stack should have 10 elements.
7. Push 10 items into the stack.
8. Print out the contents of the stack.
9. Print out the top of the stack. Which method should you use?
10. Push another element into the stack. Do you get an error? Such an error can be avoided by checking if the stack is full before pushing another element to the stack. Make changes to the push method to avoid an overflow error.
11. Push another element to the stack to see if the changes made can prevent overflow errors.
12. Pop 5 elements from the stack.
13. Print out the contents of the stack.
14. Print out the top of the stack.
15. Pop 6 elements from the stack. Do you get an error? Such an error can be avoided by checking if the stack is empty before popping another element to the stack. Make necessary changes to avoid underflow errors.

# Part 2

You will to be able to check if a string is a palindrome. Modify the StackX class so that it can be able to do this. You are also required to create a test class with a main method and use new class to test some sample palindromes.

# Required

1. Modified StackX class as per step 1
2. Modified StackX class as per step 2 and its associated test class.