Lab 07

This lab exercise must be submitted for a grade. You may work collaboratively with another student, but each student must submit his/her own solution using his/her own account. This exercise must be submitted by 11:00PM on Tuesday 10/11. There is no extension for late submissions.

Do not change any public members to private! Our tests need to access them to ensure that you have followed the instructions, below.

0. Checkout the project called 132Fall2016Lab07. It contains some public tests, an interface called MyStack, and two partially written classes which implement that interface (MyArrayStack and MyLinkedListStack).

1. Complete the class called MyLInkedListStack so that it implements the MyStack interface using a linked list. **Be sure to use the efficient end of the linked list as the "top" of the stack.** If you use the wrong end, you will fail all of the secret tests. If you implement this class in any way other than we have specified you will fail the secret tests.

2. Complete the class called MyArrayStack so that it implements the MyStack interface using an array. We will be using the technique (described in the lecture) that results in very fast operations, in aggregate. (Your TA will review it.) **Include a no-argument constructor that will initialize the array to length 10**. Any time the user requests "push" but the array is full, double the length. Calling "pop" will never result in the array shrinking. If you implement this class in any way other than we have specified you will fail the secret tests.

3. Although they will not be graded, you should consider writing additional test cases to make sure that your code is working correctly!