CS 315 Homework 2

Due Thursday, September 27, 2018 by class time

You have been given an interface called **OurStack** and a class called **OurLinkedStack** that implements the interface. You do not need to do anything with the interface but you need to implement all of the methods in the **OurLinkedStack** class that haven't been implemented.

Then run the **OurLinkedStackTester** class that I gave you until your **OurLinkedStack** class works. (You should NOT change anything in this tester class. If you think there is an error, contact me.)

You have also been given an interface called **OurQueue** and a class called **OurLinkedQueue** that implements the interface. You also do not need to do anything with this interface but you need to implement all of the methods in the **OurLinkedQueue** class that haven't been implemented.

Then run the **OurLinkedQueueTester** class that I gave you until your **OurLinkedQueue** class works. (You should NOT change anything in this tester class either. If you think there is an error, contact me.)

Once again, you have been given a class called **Homework2Application** with methods that have to be implemented. The purpose of this class is to act as an application that has a method called roll that solves question 3 on page 225 of the text. Note that question 3 refers to the Stack class but I want you to use the **OurLinkedStack** class. You may also need to use the **OurLinkedQueue** class to help solve the problem.

Since you will be using the **OurLinkedStack** class, the prototype for the roll method looks like the following and NOT like the one in the text:

```
public static void roll(OurLinkedStack<Character> stack,
int n, int k) throws Exception
```

Your job is to implement all the methods that need implementing. The description for each method is inside the method as comments with the exception of the roll method which is in the text.

When you are done zip up **ALL** files into **ONE** zip file and upload the zip onto Canvas.