Computer Science 115
Assignment 2 – Part I
Due Date: February 6, 2011 11:59pm.

Objectives

- Practice with Linked List
- Learn to follow a specification
- Understand limitations of representing decimal numbers using `double`
- Exposure to javadoc commenting
- Exposure to more complete testing

Introduction

You've been provided with an interface which defines a list of double values. You can find a description of the interface here: http://webhome.csc.uvic.ca/~jcorless/javadocs/

It is your responsibility to provide an implementation of the interface that uses a linked list to store the elements.

Requirements

1. Provide an implementation of the interface in a class called `LinkedListOfDoubles.java`
2. You must create your own Node class that has at least an element and a next reference. Create this in a file called `DoubleNode.java`
3. You must implement all the operations yourself – you cannot use any Java API functions
4. Your list must provide a constant time implementation of addBack and addFront. In practice, this means you must have a tail reference in addition to a head reference.

Testing

You've been provided with a test program which should help you in making sure your code works. If you fail a test case, it is likely you will fail all subsequent test cases – fix your errors one at a time.

Note that your assignment will be graded with additional test cases – just because you pass all the tests in the supplied tester does not mean you get a perfect score.

Submission

Submit your `LinkedListOfDoubles.java` and `DoubleNode.java` files using Connex. If you name your files differently or your code does not compile, you will receive 0 for this assignment.