INFSCI 2500

Homework 3

The assignment is to write a java program which illustrates the differences in the performance of ArrayLists and LinkedLists. The program should create and populate an ArrayList and a LinkedList with 1 million entries each. Then the program should loop though each list and access each entry. The entries do not need to be printed out. Next, the program should loop through the lists and remove each entry. Time each step independently for each list. Print out the time taken for add, get, and remove for both lists. Last, make a bar graph of the values you obtained using Excel and discuss if it is what you expect to see.

Submit the following:

1. The java source file.
2. A pdf readme file which includes the output you got from your program.

Zip these items together and name it “HW3\_Your\_Name”. Then submit it on courseweb.

Grading:

2 points: Submitting the source file and pdf with output.

2 points: The source file compiles and runs without errors.

2 points: The program performs as laid out above.

This assignment is due October 10 at 5:59 PM. Late submissions will not be accepted!

Example Output:

