Follow the directions below:

Write a test program that stores 50,000 integers in LinkedList and test the time to traverse the list using an iterator vs. using the get(index) method.

* Test your program storing first 50,000 and then 500,000 integers.
* After completing this program and having tested both values, in your comments, explain the results and discuss the time taken using both values and their difference with the get(index) approach.
* Write test code that ensures the code functions correctly.

**Assignment Requirements and Grading:**

1. This assignment is due by **Sunday, 11:59 p.m., CST.**
2. Add the necessary documentation as described in [Documentation Requirements](https://cyberactive.bellevue.edu/bbcswebdav/xid-99483471_4) [Click for more options](https://cyberactive.bellevue.edu/webapps/blackboard/content/listContent.jsp?course_id=_536383_1&content_id=_16746329_1&mode=reset#contextMenu) .
3. Submit your .java file(s) by clicking on the Assignment Link above, then scroll down to the Upload Files section and click on Browse Local Files. Select your assignment file(s), add any links as appropriate, add the URL to your GitHub repository in the comments area, then click on Submit.
4. Create (if you haven't already) a directory in CSD-420 named module-4.
5. Save your java file(s) to your CSD/CSD-420/module-4 directory. Stage, commit and then push the file(s) to your GitHub repository.
   * Click on the following link for instructions: [GitHub Stage, Commit, and Push.pdf](https://cyberactive.bellevue.edu/bbcswebdav/xid-101703982_4) [Click for more options](https://cyberactive.bellevue.edu/webapps/blackboard/content/listContent.jsp?course_id=_536383_1&content_id=_16746329_1&mode=reset#contextMenu)
6. To view or print the grading rubric for this assignment, click on the following link: [Programming Rubric](https://content.bellevue.edu/cst/csd/rubricprogrammingv2.pdf)