

Lab #1

COSC 20803

Fall 2021

Due: Wednesday, 29 September

Using the LinkedList class published on our course pages on TCU Online, add a *sort* method that rearranges the LinkedList in ascending order using insertion sort.

insertion sort first creates an empty list by changing links

while the original list is not empty

 move (by changing links) the next item from the original list to its proper place in the sorted list

DO NOT create any new nodes during the sort.

Then change the main method to do the following

1. create a LinkedList that can hold Integers
2. read from System.in a value for n
3. read n integers adding them to the LinkedList
4. use the *sort* method to sort the integers
5. print the first and last values in the list
6. create a LinkedList that can hold Strings
7. read from System.in a value for m
8. read m Strings adding them to the LinkedList
9. use the *sort* method to sort the Strings
10. print the first and last Strings in the list

Submit the revised LinkedList.java file

25% of the grade will be allocated to

Well structured

Thoroughly documented

Appropriately named variables and methods

Properly indented