Lab #1 COSC 20803 Fall 2023

Due: Wednesday, 27 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 a recursive version of selection sort:

```
if the list has more than 1 item
    find the smallest item
    swap that item with the first item
    sort the rest of the list
```

DO NOT create any new nodes during the sort.

You may add methods but do not change anything that I wrote (other than the main method).

Then change the main method to do the following

1. create a LinkedList that can hold Integers
2. read a value for *n* from System.in
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 a value for *m* from System.in
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