

Objective: In this lab you will perform several tasks on a singly linked list.

First finish writing the `SinglyLinkedList` class. The file `SinglyLinkedList.java` file is in the class conference Files folder.

Secondly write a menu-driven program called `ListTest.java` to demonstrate that all of the methods in your new class are fully functioning.

Finally in addition to a direct demonstration of the methods, write the following methods:

<code>rotateList</code>	Splits off the first node of a nonempty list and append it to the end.
<code>inOrder</code>	Return true if a list is in ascending order and return false if it is not.
<code>putInOrder</code>	“Sort” the list by putting the elements in ascending order. Duplicates are allowed, deal with them.

Use the `ListNode.java` class for your node definition, and use the Iterator `SinglyLinkedListIterator.java` when appropriate.

Be sure to test your code with empty lists, lists containing just one node, and lists containing more than one node.