1 Reversing a Linked List

This assignment is straight forward. You need to copy over all the code you wrote for the linked list earlier on in the

semester.

All functions should be brought over: push, pop, insert, remove, remove_at, len etc.

You need to add just one function to the list. This function reverse_list should be a member method that

does not take any input from the outside. It should reverse the list in place. That means that it should not create a

new list, it should update the head and all reference variables for all nodes so that the head becomes the end and

the original last node becomes the new head.

(Obviously, if you try to reverse a list which has no nodes, or just one node, nothing will happen.)

As an example of how this should work, the following code:

```
l = LinkedList()

l.push(1)

l.push(2)

l.push(3)

print(l)

l.reverse_list()

print(l)
```

should produce the output:

```
[1, 2, 3]

[3, 2, 1]
```