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LinkedList Commentary

What is the computational complexity of the methods in the implementation?
LinkedList Implementation
add(): O(1) this function adds to the end using the Tail pointer that the list has
add(index): O(n) this one will iterate to the desired index starting from the Head
set(index): O(n) again, this iterates to the desired index to be modified
remove(index): O(n) this function has many edge cases, in general it will iterate until the index, but it can be O(1) for heads and tails
get(): O(n) again iterating to the index

Line Editor
This class mainly uses the LinkedList functions
insertEnd(): O(1), this function uses “add” to find the tail and insert the Node
insert(): O(n) in general it iterates through the List, it uses “add”
delete(): O(n) uses function “remove”
edit(): O(n) uses function “set”
print(): O(n) this function iterates through all the list printing the node content, it does so once
search(): O(n) against it iterates through the List making the necessary verifications and printing i necessary