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PA1 Commentary

What is the computational complexity of the methods in the implementation?

* Node – O(1)
* LinkedList – O(1)
* InsertEnd – O(n)
* Insert – O(n)
* DeleteLine – O(n)
* Edit – O(n)
* Print – O(n)
* Search – O(n)
* Quit – O(1)

Your thoughts on the use of linked lists for implementing a line editor.  What are the advantages and disadvantages?

* I think using a linked list is a pretty decent way to implement a line editor. The advantage is that it is dynamic, it can grow and shrink as it needs. The disadvantage is for retrieval and editing, you could get better efficient, O(1), from using a HashMap.

What did you learn from this assignment and what would you do differently if you had to start over?

* I learned about strings and their methods in C++, inserting and deleting from linked lists, traversing linked lists, and user input in C++. If I had to start over, I would consolidate my code a little more. For example, I would create a line editor class to clean up the main method and write a few helper functions for the common procedures like breaking down the user input. Additionally, I would create a tail node to make insertEnd work in constant time vs. linear time.