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Project 8 Documentation

The purpose of this project was for us to get familiar with mode based lists and array based lists. This project took me the most time and was very intricate. One thing that helped me a lot was drawing pictures of what I needed to do. For the node based list, it was much easier than the array based list. All that needed to be done was the links being changed and didn’t need to allocate a bigger container as in the array based list. Drawing pictures of how things needed to be linked had my code error free. Pseudocode and pictures allowed my linking to be done right.

An array based linked list would be something that I would never personally use. It is much more complicated than a node based list and does not have any practical purpose in my opinion other than being a bit faster as you can access individual elements directly with brackets and does not require traversal as in the linked list.

At first node based linked lists was a concept that did not make any sense to me. Not until I watched Youtube videos on linked lists that showed visual representations on the process of how they’re formed is when I fully started to grasp it. I then went through the lecture notes and drew how to traverse a node based linked list and then it finally made sense. The head of the list moves every time a node is added and when you create one you have the a dynamically allocated node m\_next point to the head then the head pointer traverses to the left and is assigned to the to the new created node. Since the new created node was dynamically allocated the head can point to that node.