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3-3 Project One Milestone One Vector Data Structure

The code's goal is to write an application that can process data from a file and turn it into a linked list. Once the list has been established, the user should be able to see the list, search the list, add and delete things from the list, and rearrange the list to start or end. The activity, in my opinion, was really simple to grasp and follow. As a result, carrying out the exercise was also rather simple. I find it a little difficult to follow directions, but as the weeks pass, I am more adept at them. I got through this one somewhat with the aid of the textbook.

Pseudocode

Add to a list that is linked:

Establish a new node and provide it input.

Assign the new node to the head and tail of the list IF the head is empty.

If not, set the new node as the new tail and make the current tail point to it.

To a linked list, prepend:

Construct a new node and give it an input.

Assign the new node to the head and tail of the list IF the head is empty.

If not, position the new node as the head and make it point to the head.

Create a linked list and print it:

Output the element's attributes starting at the head WHILE the current element is still present.

The current element will be increased to the next indicated element in the list.

Delete from a linked list:

If the selected item is the head node, remove it while the element in the list exists but does not match the key.

Check if the element is the key; if so, assign it to the temporary value.

If it is not, verify the following value.

Delete the temporary value.

Search a linked list:

Assign a new node to the head while the element still exists.

If the element matches the search key, return it and advance to the next element.

If none of the elements match the search key, return empty.