## Question 1.

Re-do Problem 1 from the 2023 midterm, with one change: put the declaration of structs in a separate h file, the implimentation of append in linkedlist.c, and implement testing in test\_linkedlist.c.

## Question 2.

Implement a validate\_list\_length function from the linked list. The function should return 1 if the length of the linked list matches the recorded length (by going through the list and counting te nodes), and 0 otherwise.

## Question 3.

Implement a **delete** function for the linked list. The function should take an index of a node that needs to be deleted, and update the linked list to remove the node. Make sure to **free** the removed node.