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CS 162 Section 002

Design for Assignment #5

- (5 pts) How did your design for the Linked List in Assignment #5 change during implementation?

During implementation, I was forced to change the way I treated the linked list in order to use the sort algorithm I derived. Instead of treating the list as a series of objects I copied it into an array to manipulate it easier. Additionally, I was forced to redesign my sorting algorithm four times to finally achieve one that worked, iterating through the list twice, swapping through for each individual element.

- (5 pts) What were the actual values from your testing? Did these match your expected values? What did you do to make sure you get the expected values?

Aside from an expected error with alpha input, my expected and actual values are identical.

| Input Values | Expected Output | Did actual meet expected? |
|---|---|---|
| List of random numbers | Numbers sorted in ascending or descending order | Yes |
| Letter/alphanumeric sequence | Some sort of code death | Segmentation fault; yes |
| Sequence of numbers terminated by zero, then a letter neither a nor d | No sorting | Yes |
| Sequence of numbers, letter a or d, then any sequence of letters/numbers not beginning with y | Program ends | Yes |

Note: error checking, while not implemented, would be a simple matter of changing the input's type from a number to a letter, checking its validity as a number (and discarding invalid inputs/reprompting) then casting it into an integer and passing it to the push function.