

COEN 11 Lab 5

Steps

1. Open up Terminal and connect to the Linux computers:
ssh -l username linux.dc.engr.scu.edu
2. Go to COEN 11 directory: ***cd coen11***
3. Copy the contents of lab2 into a new file: ***cp lab3.c lab5.c***
4. Edit lab3: ***vi lab5.c***
5. Compile the file: ***gcc -o lab5 lab5.c***
6. Test your file: ***./lab5***

Requirements

Only 2 global variables (**head** and **tail** pointers), where head points to the first element and tail points to the last element.

No maximum limit on the size of the waitlist (i.e. no counter).

Struct will store the name, group size, and the pointer to the next node (entry).

All functions (insert, delete, show, search_size, check_duplicate) should be modified to use the linked list pointers, instead of the struct array.

Insert function ~ Insert elements at the end of the list and update the tail pointer. If the list is empty, update the head pointer as well.

Delete function ~ Make sure the list elements are moved according to the element being deleted and the head & tail pointers are updated. The same logic of searching the list until all the openings have been filled should be applicable.

Remember to free the node after it is deleted from the list.

Demo and submit source code to Camino

When Submitting the Code...

Add comment at the top of the page with...

- Your name
- Course title
- Lab number
- Lab time and date

```
/* Emma Allegrucci  
 * COEN 10  
 * Lab 5  
 * Monday 2:15pm  
 */
```

Helpful Resources

*** “The C Programming Language, 2nd Edition” ***

C: <https://devdocs.io/c/>

C: https://www.tutorialspoint.com/c_standard_library/index.htm

Terminal commands:

<https://cheatography.com/davechild/cheat-sheets/linux-command-line/>

Vim commands: <https://vim.rtorr.com/>

