



comp1511 week 09

notices

- assignment 2 due next friday 🙄🙄
- you are doing great :)

today

- free
- linked list exercises

style tips

- **constants:** please #define them!
 - this includes commands (eg. #define ADD_LIST 'I')
- **functions:** short and sweet, should have one task
 - really, really important for writing good code
 - helps with overdeep nesting
 - main function should be short
- **function comments:** they go above the function and explain what the function does
 - input (including assumptions eg. “takes in a valid coordinate”), output (what it returns), any additional effects
 - comments that make sense on their own rather than “stage 1.2”
- ***any others you want to share?***

assignment 2

- how are you going?
- any questions?

free (with volunteers)

- **common mistake #1:** memory leaks
 - ``dcc -o -leak-check``
- **common mistake #2:** use after free
- **how to free** a linked list
 - `free(head)` doesn't free the whole list
 - to free a linked list, you need to loop through everything

linked list exercises

*choose any one of the functions to implement
copy, append, identical, set intersection*

- draw a diagram
- identify how many things need to be malloced/freed
- outline the steps you will take
- are there any special cases to consider?
- code it up
- test your code with a few examples

<https://replit.com/@adaluong/Linked-Lists-22T3-W9#main.c>

List.c - <https://codeshare.io/3ABwgz>

List.h - <https://codeshare.io/bv8gxj>