



comp1511 week 4

starting ~5 minutes past the hour

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announcements

- congrats on finishing **assignment 0!!**
- **assignment 1** coming soon :D
- **help sessions** now running!
- this sunday is **census date**

✨assignment 0 reflection ✨

today

- arrays
- scanning in loops
- functions
- [lab time]
 - will try to come around to chat to everyone 1-on-1
 - can give early style feedback on a piece of code

arrays

what are they and why do we care?

0	1	2	3	4	5
3	24	7	0	13	63

Setup

- ☐ Create three procedures, named "odd_only", "copy_array", and "largest_character"

Odd Only

- ☐ Create an integer array with at least 5 elements.
- ☐ Create a while loop which loops through every element of the array.
- ☐ Write an `if` statement which adds 1 to each **even** value. Do this within the `while` loop.
- ☐ Write another while loop which goes through the array *with a different iterator* (i.e. if you used `i` last time, use `j`)
- ☐ Print out the values in the array.

Copy Array

- ☐ Create an array of doubles with 3 elements, each with a non-zero value.
- ☐ Create another array of doubles with 10 elements where every element initialised to `0.0` .
- ☐ Create a while loop that loops through every element of the first array.
- ☐ Copy the elements of the first array into the second array (leave 0's at the end)
- ☐ Create a while loop that prints out all the elements of the second array.

Largest Character (Extension)

- ☐ Create a character array with exactly 8 elements.
- ☐ Create a character variable called `largest_character` , equal to the first character of the array.
- ☐ Create a while loop to loop through the character array.
- ☐ Create an if statement to check if the current character has a higher ascii value than "largest_character"
- ☐ Print out the largest character you've found.
- ☐ Ensure your code would pass "1511 style"
- ☐ Go join other teams, and sit with their groups to help them finish.

ARRAYS PRACTICE (ROUND ROBIN ON THE WHITEBOARD)

how this works

three functionalities to
do with arrays

try to understand what
the goal of the section is
before coding it up

rotate between people
for each task / checkbox

scanning into arrays

We want to scan temperatures of a week into an array and then take the largest of them.

brainstorm: what are the steps needed?

functions as a concept



```
1 int get_larger(int first_num, int second_num) {  
2     int larger = first_num;  
3     if (second_num > first_num) {  
4         larger = second_num;  
5     }  
6  
7     return larger;  
8 }
```


functions as a concept



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```

writing functions for colour.c

colours.c

- struct definition (colour)
- example of a function

writing new functions in parts

<https://play.kahoot.it/v2/?quizId=49303d4d-b0c4-468e-90d6-4c92ce97bc8b>

other things to talk about

- **assignment 1**
 - live stream sometime this week
 - start early!!
- **overview of lab exercises for this week**
 - really helpful for assignment 1