

# **comp1511 week 04**

# admin

- **assignment 1** has been released!
  - please watch the livestream if you haven't already
  - due 27<sup>th</sup> March 2023 8pm
- this Sunday is census date – feel free to chat to me if you are concerned about your progress in the course

# agenda for today

- array practice
- scanning in loops
- functions practice
- assignment 1 walkthrough

**array demo (see array.c)**

# arrays practice

## Copy Array (Student Round Robin)

- ☐ 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 (Student Round Robin)

- ☐ 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.

# **scanning values into array(see scan\_into\_array.c)**

how do we scan 10 values into an array and find the maximum value?

## **scanning until ctrl+d (see scan\_end\_of\_input.c)**

we will write a program that will keep scanning in values until the user presses CTRL + D

# functions

how can we write a function that squares a number?



# functions kahoot

```
struct colour {  
    int red;  
    int green;  
    int blue;  
};
```

```
struct colour make_colour(int red, int green, int blue) {  
    struct colour new_colour;  
  
    new_colour.red = red;  
    new_colour.green = green;  
    new_colour.blue = blue;  
  
    return new_colour;  
}
```

<https://create.kahoot.it/share/writting-colours-22t3/49303d4d-b0c4-468e-90d6-4c92ce97bc8b>

# assignment 1 walkthrough

<https://cgi.cse.unsw.edu.au/~cs1511/23T1/assignments/ass1/index.html>

- style tips:
  - include a header comment with all information,
  - run 1511 style cs\_defence.c
  - #define all constants AND all char commands
    - e.g. #define CREATE\_TOWER 't' and #define TRUE 1
  - make sure output matches examples in spec exactly
  - above every function, there should be a comment explaining its purpose
  - use helper functions!

**any questions?**