# comp1511 week 04

#### admin

- assignment 1 has been released!
  - watch the livestream for a detailed runthrough: <a href="https://www.youtube.com/live/LLsch8g2D74?feature=share">https://www.youtube.com/live/LLsch8g2D74?feature=share</a>
- this Sunday is census date feel free to chat to me if you are concerned about your progress in the course
- plenty of help sessions are running for 1:1 help:

https://cgi.cse.unsw.edu.au/~cs1511/23T3/flask.cgi/help-sessions/

### agenda for today

- arrays
- scanf in loops
- functions
- assignment 1

## array demo (see array.c)

### arrays practice

Odd Only (Tutor Demo)

- 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.

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.
- Ensure your code would pass "1511 style"
- Go join other teams, and sit with their groups to help them finish.

# 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

In this section, we will write a program that create functions to help us deal with colours.

The following struct will be useful for this tutorial:

```
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/~cs1511/23T3/assignments/ass1/index.html
- style tips:
  - include a header comment with all information
  - run 1511 style cs\_pacman.c
  - #define all constants AND all char commands
    - e.g. #define PLACE\_WALL 'W', #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?