

comp1511 week 05

admin

- keep working on **assignment 1!**
- no tutorials or labs next week (flex week) but there will be help sessions and revision sessions!

agenda for today

- 2d arrays
- arrays and functions
- strings
- assignment 1 style

2d arrays (see 2d_array.c)

tic tac toe!

arrays and functions

1. Write the following function: `void square(int x);`, which
 - Takes in an integer `x`
 - Modifies `x` so that it equals `x * x`.

arrays and functions (cont)

2. Write a function called `square_array`, which
 - Takes in array (called `array`) of size `length`.
 - Squares all elements inside the array.

strings (see strings.c)

how do we declare and initialise a string?

how do we loop through a string?

how do we print a string?

string practice

```
// Functions to implement:

// 1.
// returns the number of lowercase letters in `char *string`
int count_lowercase(char *string);

// 2.
// modifies `char *string` by converting all its vowels to uppercase
void make_vowels_uppercase(char *string);

// 3..
// shortens a string so that it ends after the first word
// e.g. "This is a sentence" should turn into:
//      "This"
//
// (hint. what defines when a string ends?)
void delete_following_words(char *string);
```

helper functions provided at:

<https://edstem.org/au/courses/12009/lessons/37623/slides/261518>

assignment 1 style!

- include a header comment with all information,
- run 1511 style cs_carpark.c
- #define all constants AND all char commands
 - e.g. #define PARK_CAR 'p' 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?