Welcome!

COMP1511 18s1
Programming Fundamentals

— Lecture 7 —
Unit Testing, Arrays + Functions

Andrew Bennett
<andrew.bennett@unsw.edu.au>

Before we begin...

introduce yourself to the person sitting next to you

why did they decide to study computing?

Overview

after this lecture, you should be able to...

understand the basics of unit testing using asserts
understand the basics of designing a solution to a problem
have a rough understanding of Assignment 1
understand more about passing parameters into functions
write programs using arrays to solve simple problems

(note: you shouldn't be able to do all of these immediately after watching this lecture. however, this lecture should (hopefully) give you the foundations you need to develop these skills. remember: programming is like learning any other language; it takes consistent and regular practice.)
Admin

Don't panic!

lecture recordings are on WebCMS3
course style guide published
weekly test due tonight
don't be scared!
assignment 1 released!
don't forget about help sessions!
see course website for details

time2code
(assignment spec on course website)

C Requirements

if statements
functions
asserts (unit testing)

Unit Tests

“As well as testing my whole program,
I’ll test each of the small parts of it.”

faster and easier to check our small units
and then check the whole program
Testing with `assert`

```
#include <assert.h>

... 

int i = 3;
assert (i == 3);
assert (doubled(3) == 6);
```

Review: Features of Functions

- a function can have zero or more parameter(s)
- a function can only return zero or one value(s)

**Review: Function Parameters**

- names don't matter
- order matters

Feedback?

```
bit.do/comp1511-feedback-week4
```

alternate link: https://andrewb3.typeform.com/to/WrAhfV