

COMP1511 Week 1!

F09G: 9am – 12pm

Tutors: Rory Golledge (not me!) + Morgan Swaak

Labs: Quad G026 (here!) + FluteME303 (Ainsworth!)

My GitHub:



https://github.com/william-o-s/unsw_comp1511_tutoring

The Agenda

Introductions

Let's introduce ourselves!

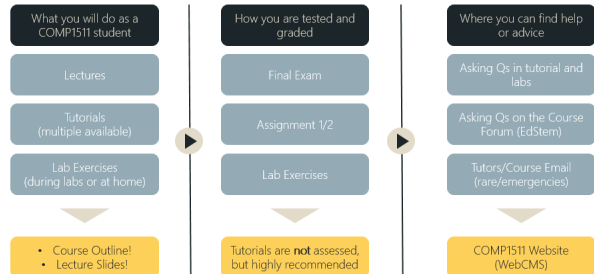
- Name
- Year + Degree
- What you were doing 1 hour before the tutorial started
- Read out someone's name (can't be your own, or repeated)
- Drawing/Undo instruction for either dog

Jagriti	Gan	Shiv	Tarit	Rocky
Candice	William	Ellyia	Matthew	Boven
Hongjie	Lachlan	Yifan	Mohammed	En
Frank Dong	Ryan	Melissa	Francis	First Names
Darcy	Joseph	Andrew	Wynter	



COMP1511 QnA

What is COMP1511? Who is COMP1511? Why is COMP1511?



VLAB Demo

What is VLAB? What is the terminal?



- Open a folder/directory:
`cd`
- Going to the parent folder/directory:
`cd ..`
- View the contents of a folder/directory:
`ls`
- Create a new directory:
`mkdir`
- Open/Create a file using **VSCode**:
`code .` OR `code YOUR_FILE_NAME.c`
- What do the arrow buttons do?

Coding Exercises

With the person next to you, discuss this code...

```
1 // Basic Hello World program
2 // Marc Chee, September 2020
3
4 #include <stdio.h>
5
6 int main(void) {
7     // This prints "Hello World" to the terminal, and the next terminal
8     // command is printed on the line below it, instead of on the same
9     // line.
10    // What does this imply about what '\n' does?
11    printf("Hello World\n");
12
13    return 0;
14 }
```

Jeopardy Time:
Which command compiles this code?

gcc	dcc
hsc	compile

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By the way, there was additional context

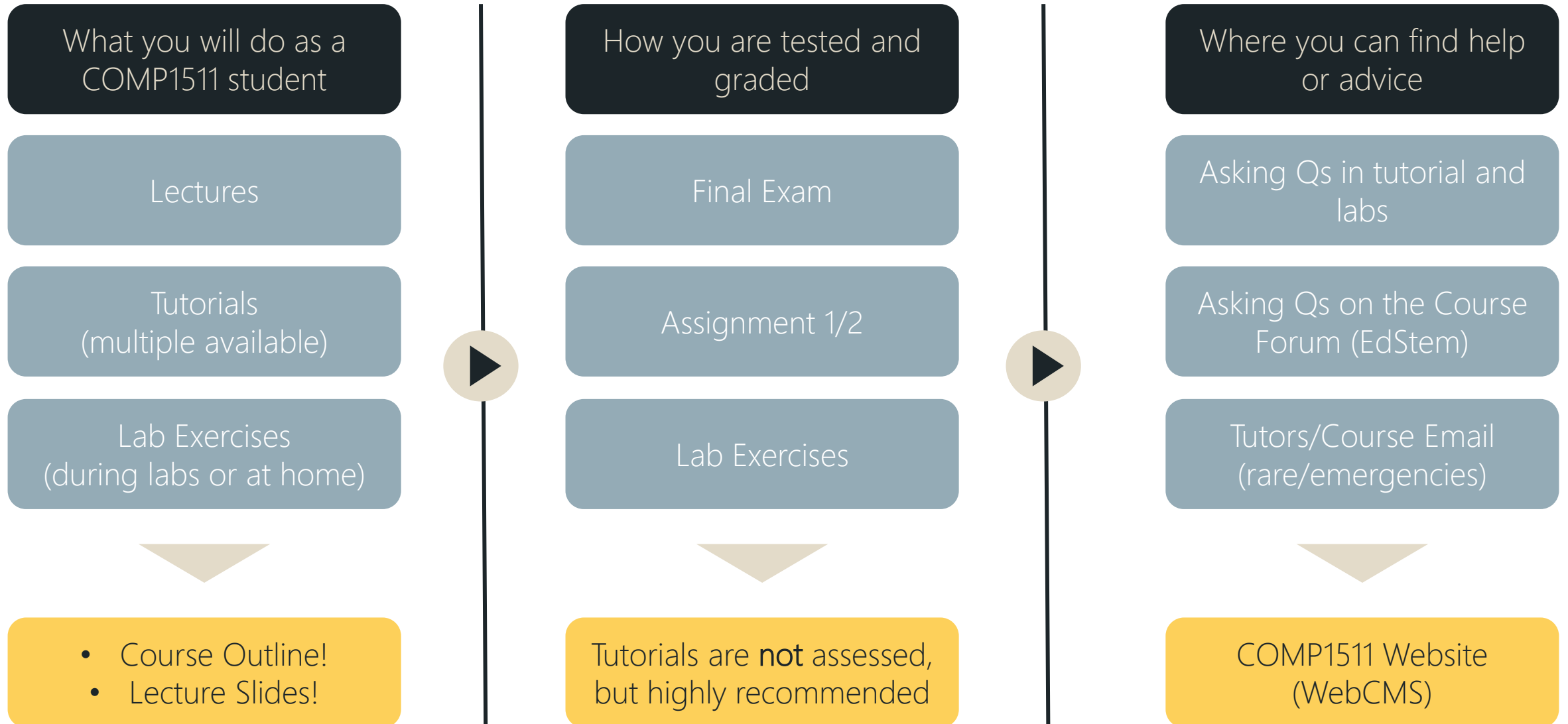


djarinstarwhores

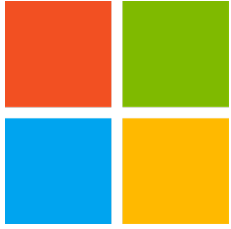
I feel like people are missing the Very Important reference picture and that's just criminal. Clearly if you look at the dog that inspired the piece, you would understand the inherent validity of the voters' choice.



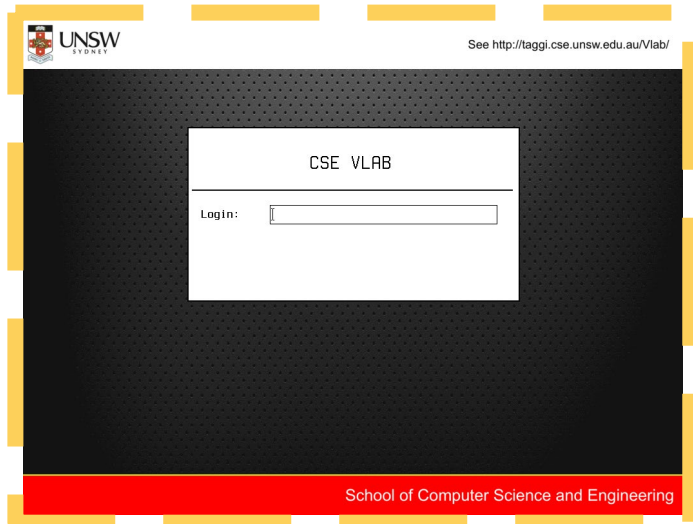
What is COMP1511? Who is COMP1511? Why is COMP1511?



What is VLAB? What is the terminal?



VS.



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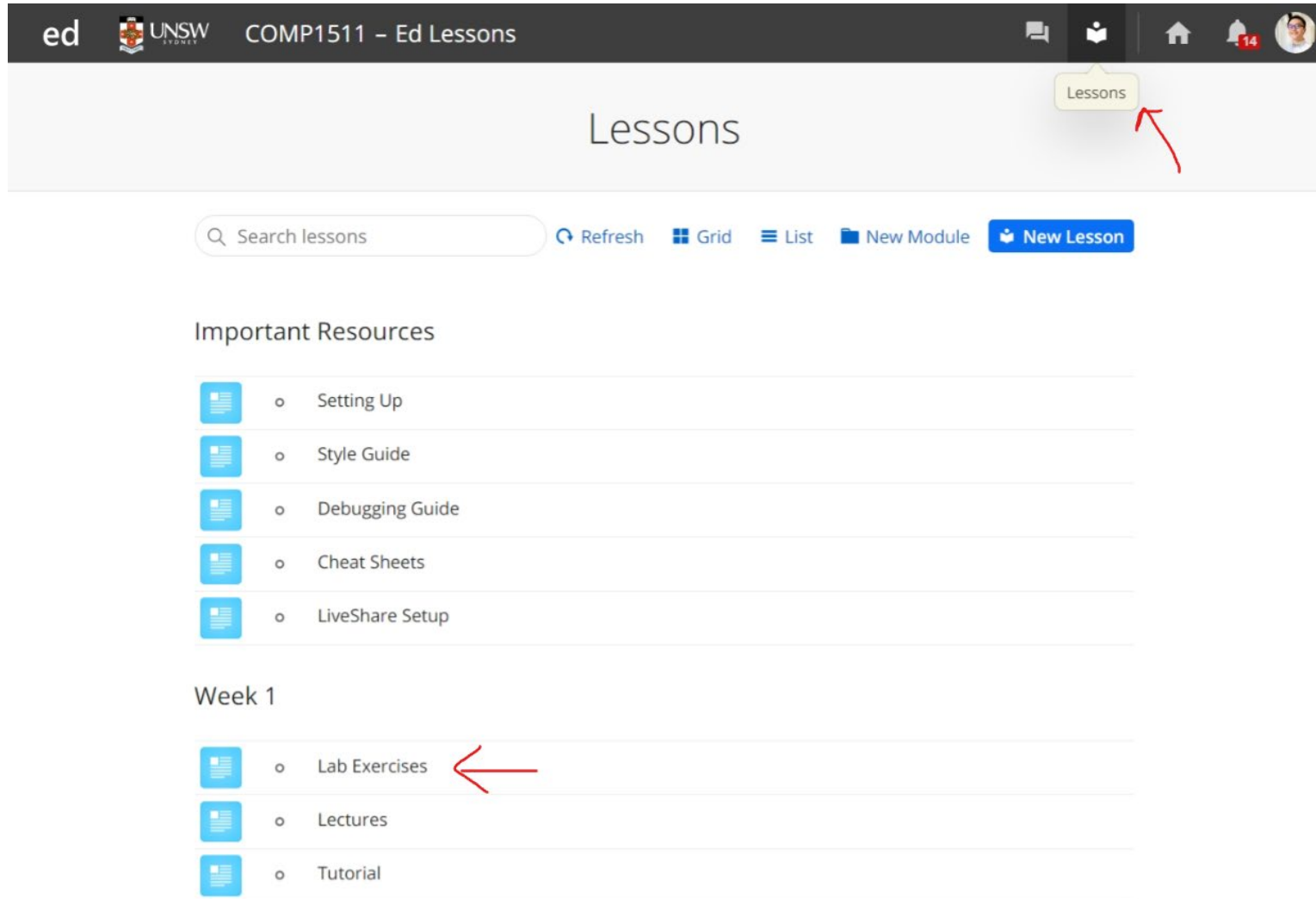
Jeopardy Time:
Which command compiles this code?

gcc	dcc
hsc	compile

Let's dive into a short coding exercise too...

```
1  // Prints a happy face
2  // William Setiawan (z5388080)
3  // on 2/6/2023
4
5  #include <stdio.h>
6
7  /**
8   * The face should look like:
9
10     ~ ~
11     0 0
12     o
13     \_/_
14
15     */
```

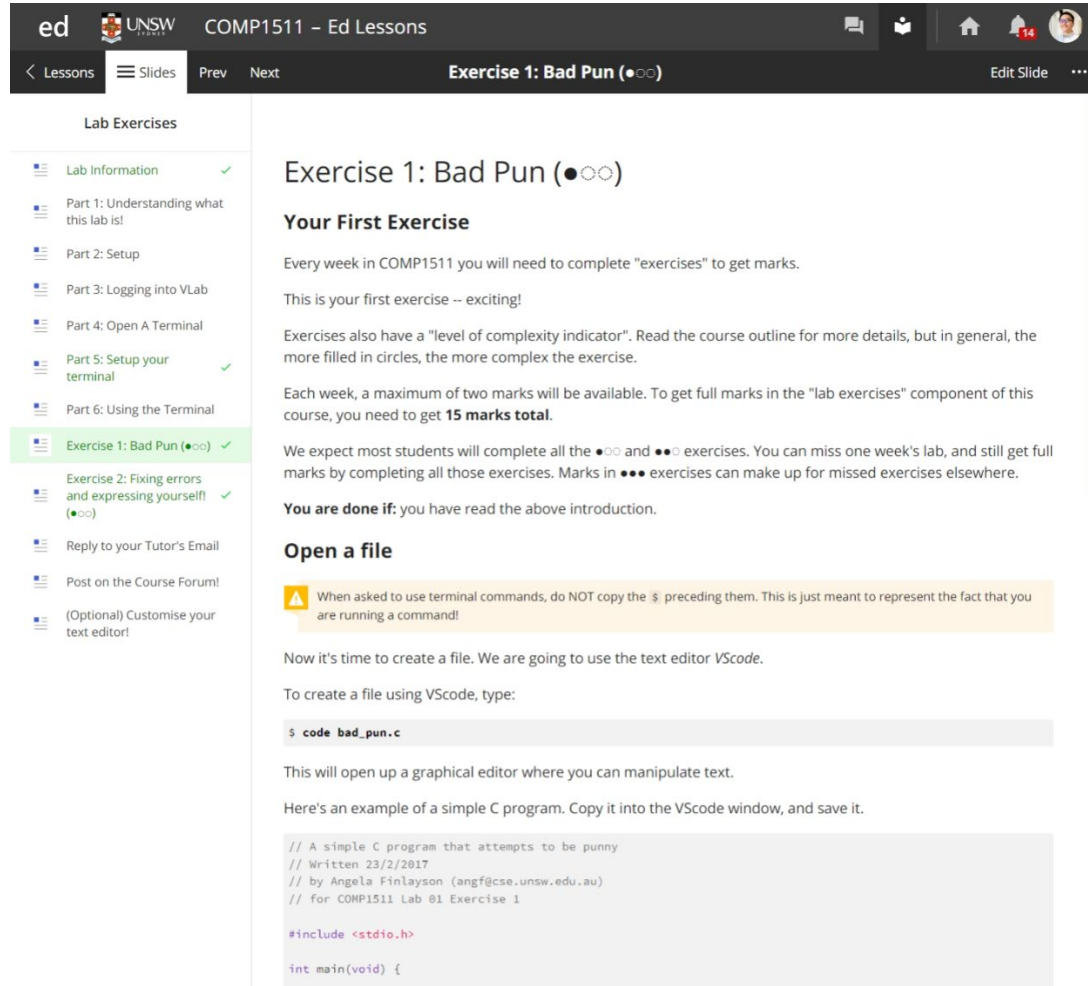
Find your labs in EdStem!



Hot Tip!

1. When setting up VLAB, select:
use default config
2. If something goes wrong, use:
1511 reset_dock

Find your labs in EdStem!



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< Lessons Slides Prev Next Exercise 1: Bad Pun (●○○) Edit Slide ...

Lab Exercises

- Lab Information ✓
- Part 1: Understanding what this lab is!
- Part 2: Setup
- Part 3: Logging into VLab
- Part 4: Open A Terminal
- Part 5: Setup your terminal ✓
- Part 6: Using the Terminal
- Exercise 1: Bad Pun (●○○) ✓**
- Exercise 2: Fixing errors and expressing yourself! (●○○)
- Reply to your Tutor's Email
- Post on the Course Forum!
- (Optional) Customise your text editor!

Exercise 1: Bad Pun (●○○)

Your First Exercise

Every week in COMP1511 you will need to complete "exercises" to get marks.

This is your first exercise -- exciting!


Exercises also have a "level of complexity indicator". Read the course outline for more details, but in general, the more filled in circles, the more complex the exercise.

Each week, a maximum of two marks will be available. To get full marks in the "lab exercises" component of this course, you need to get **15 marks total**.

We expect most students will complete all the ●○○ and ●●○ exercises. You can miss one week's lab, and still get full marks by completing all those exercises. Marks in ●●● exercises can make up for missed exercises elsewhere.

You are done if: you have read the above introduction.

Open a file

 When asked to use terminal commands, do NOT copy the \$ preceding them. This is just meant to represent the fact that you are running a command!

Now it's time to create a file. We are going to use the text editor VSCode.

To create a file using VSCode, type:

```
$ code bad_pun.c
```

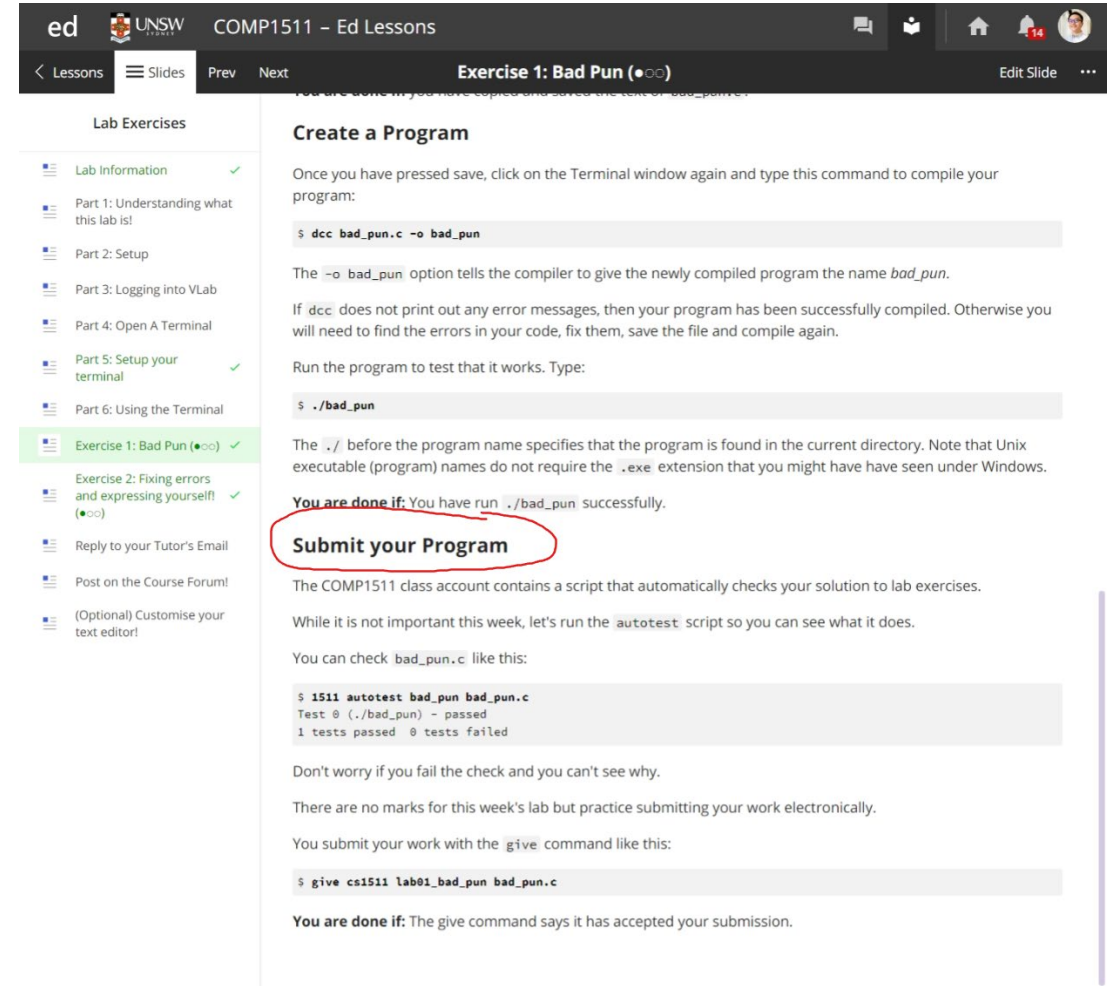
This will open up a graphical editor where you can manipulate text.

Here's an example of a simple C program. Copy it into the VSCode window, and save it.

```
// A simple C program that attempts to be punny
// Written 23/2/2017
// by Angela Finlayson (angf@cse.unsw.edu.au)
// for COMP1511 Lab 01 Exercise 1

#include <stdio.h>

int main(void) {
```



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< Lessons Slides Prev Next Exercise 1: Bad Pun (●○○) Edit Slide ...

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- (Optional) Customise your text editor!

Exercise 1: Bad Pun (●○○)

Create a Program

Once you have pressed save, click on the Terminal window again and type this command to compile your program:

```
$ gcc bad_pun.c -o bad_pun
```

The `-o bad_pun` option tells the compiler to give the newly compiled program the name `bad_pun`.

If `gcc` does not print out any error messages, then your program has been successfully compiled. Otherwise you will need to find the errors in your code, fix them, save the file and compile again.

Run the program to test that it works. Type:

```
$ ./bad_pun
```

The `./` before the program name specifies that the program is found in the current directory. Note that Unix executable (program) names do not require the `.exe` extension that you might have seen under Windows.

You are done if: You have run `./bad_pun` successfully.

Submit your Program

The COMP1511 class account contains a script that automatically checks your solution to lab exercises.

While it is not important this week, let's run the `autotest` script so you can see what it does.

You can check `bad_pun.c` like this:

```
$ 1511 autotest bad_pun bad_pun.c
Test 0 (./bad_pun) - passed
1 tests passed 0 tests failed
```

Don't worry if you fail the check and you can't see why.

There are no marks for this week's lab but practice submitting your work electronically.

You submit your work with the `give` command like this:

```
$ give cs1511 lab01_bad_pun bad_pun.c
```

You are done if: The `give` command says it has accepted your submission.