



# COMP1521 Week 10

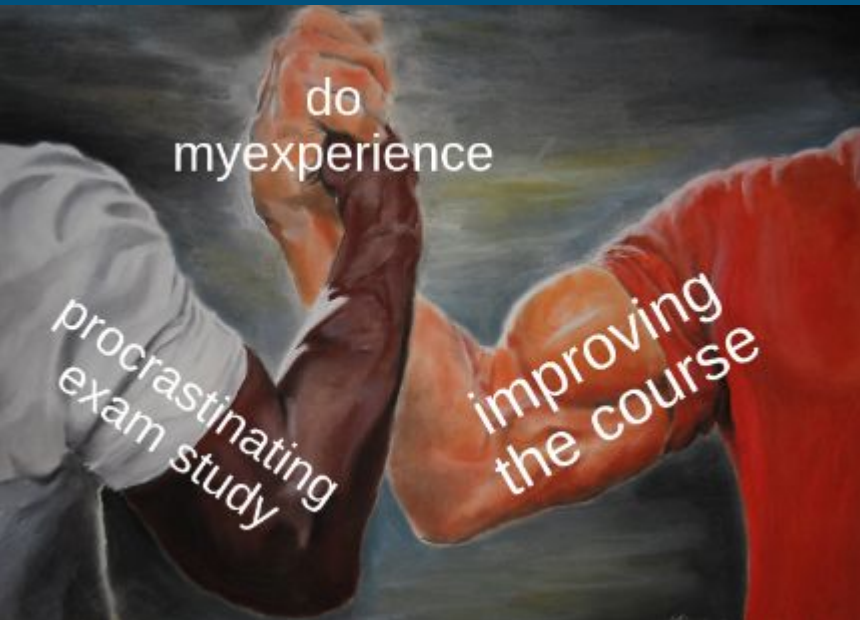


(Week 3 of) Intro to Operating Systems  
+ Revision



# MyExperience

- Please do it



# What is the difference between concurrency and parallelism?

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- Concurrency refers to the general concept of there being multiple “threads” of execution, which can be swapped between to give the illusion of multiple programs running at the same time.
- Parallelism is a subset of concurrency where several threads run at the exact same time.
- Parallelism is only possible on machines with multiple cores, or with CPUs that can perform the same operation on multiple pieces of data at once (these are called SIMD instructions).

# Concurrency in C

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- We generally use POSIX threads, as they are quite widely supported.
- `#include <pthread.h>`
- You also need to compile with the pthread flag:
  - `gcc -pthread program.c -o program`
- Run “`man 7 posix pthread.h`” in a terminal for more info.

# What can go wrong with concurrent code?



**I Am Developer**

@iamdeveloper

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2.5K



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WHAT DO WE WANT



NOW



WHEN DO WE WANT IT



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