comp1511 week 5

starting ~5 past the hour

announcements

- no tute/lab next week (flex week)
- assignment 1 exists :)

what's happening today?
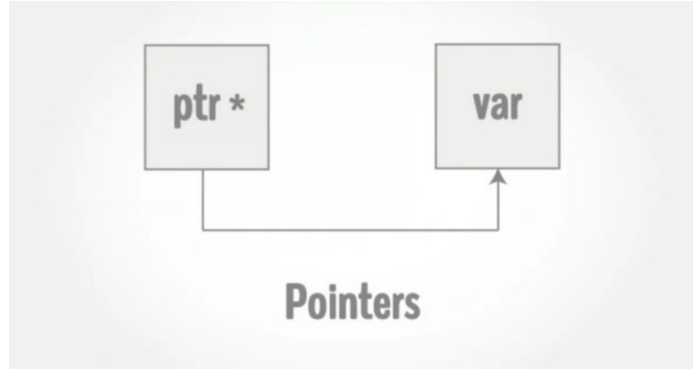
- 2D Arrays
- Pointers
- Malloc and Free

2D Arrays

https://playtictactoe.org/

score[4][5]   col →

	0	1	2	3	4
0					
1					
2					
3					

row ↓

Pointers

Pointers

variables that hold memory addresses
of other variables

pointers and memory

what will happen when each of these statements are executed in order?

https://cgi.cse.unsw.edu.au/~cs1511/22T2/tut/05/

```c
int n = 42;
int *p;
int *q;
p = &n;
*p = 5;
*q = 17;
q = p;
*q = 8;
```

malloc, free, and realloc

- Write a function called "dynamic_memory", which takes an integer called size.
- Create a dynamic array of integers, that is exactly size integers long.
- Set all the integers in that array to 0.
- Make that array twice as long.
- Set all the integers you just added to 1.
- Free the array.