pictures I took recently

COMP1511 Week 5!

M13B: 1pm – 4pm || M18A: 6pm – 9pm

Tutors: William (me!) + Vivian || Eli

My GitHub:

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

Two reminders:

Assignment 1: CS Flowers

- Week 6 does not have classes
- Assignment brief: COMP1511 24T1 — Programming Fundamentals (unsw.edu.au)

Help Sessions

- Can you access them?
- Timetable: COMP1511 24T1 — COMP1511 Help Sessions (unsw.edu.au)

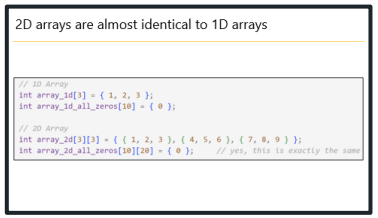
Tutorial Agenda:

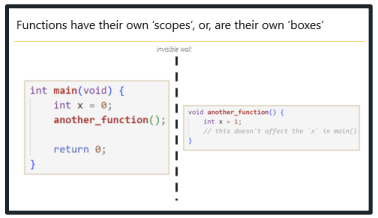
Part 0

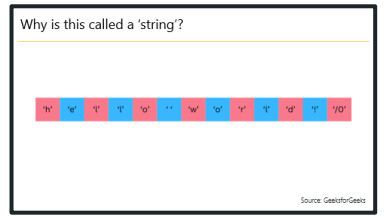
Part 1

Part 2

Part 3





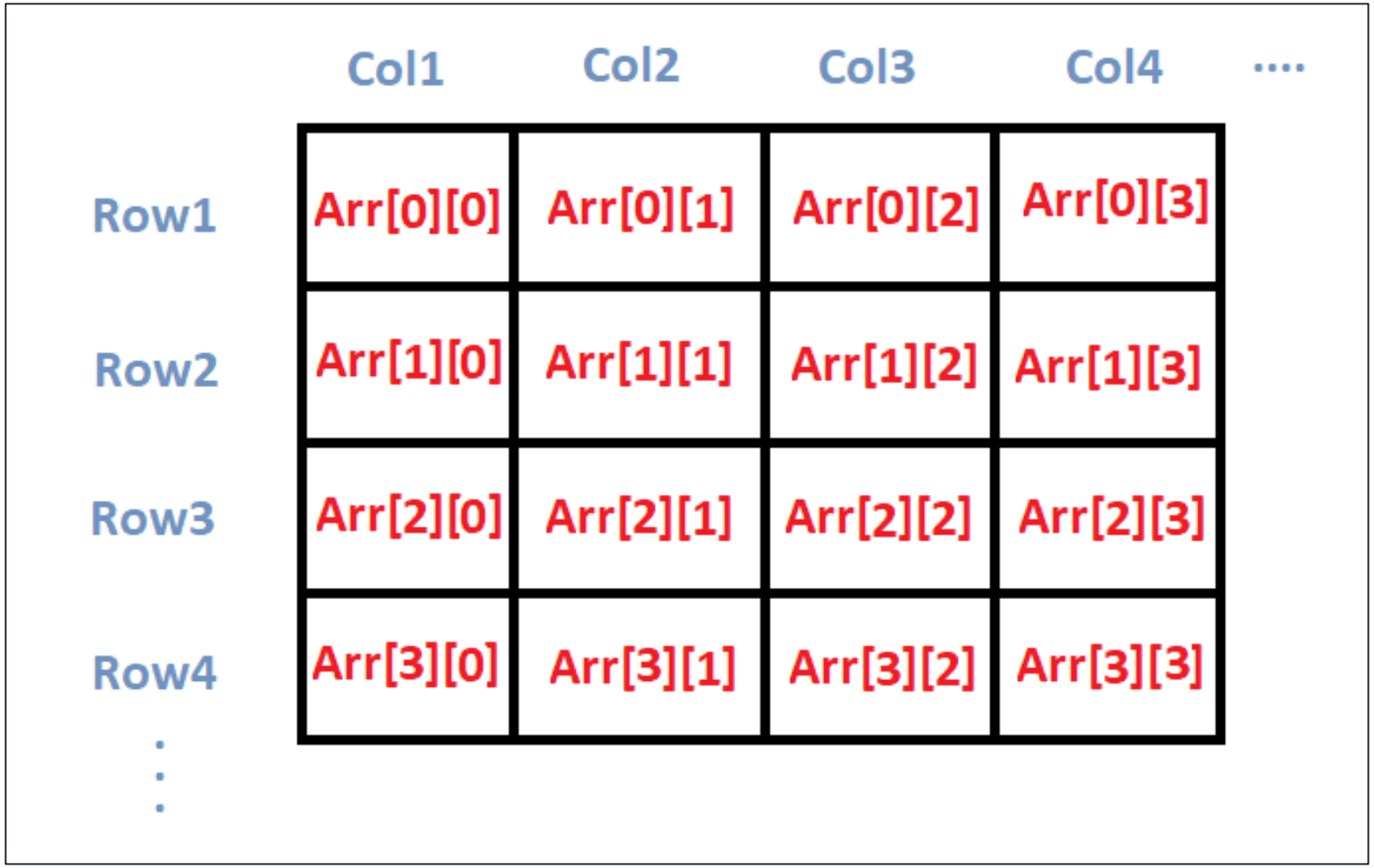


2D arrays are almost identical to 1D arrays

```
// 1D Array
int array_1d[3] = { 1, 2, 3 };
int array_1d_all_zeros[10] = { 0 };

// 2D Array
int array_2d[3][3] = { { 1, 2, 3 }, { 4, 5, 6 }, { 7, 8, 9 } };
int array_2d_all_zeros[10][20] = { 0 };     // yes, this is exactly the same
```

…including array indexing…



Source: DigitalOcean

...or reading then printing...

```c
// Reading and printing the first element
printf("%d", array_1d[0]);
printf("%d", array_2d[0][0]);
```

Source: 3 cups of coffee

...or writing to an index

```
// Writing into the first element
array_1d[0] = 7;
array_2d[0][0] = 7;
```

Functions have their own ‘scopes’, or, are their own ‘boxes’

invisible wall

```c
int main(void) {
    int x = 0;
    another_function();

    return 0;
}
```

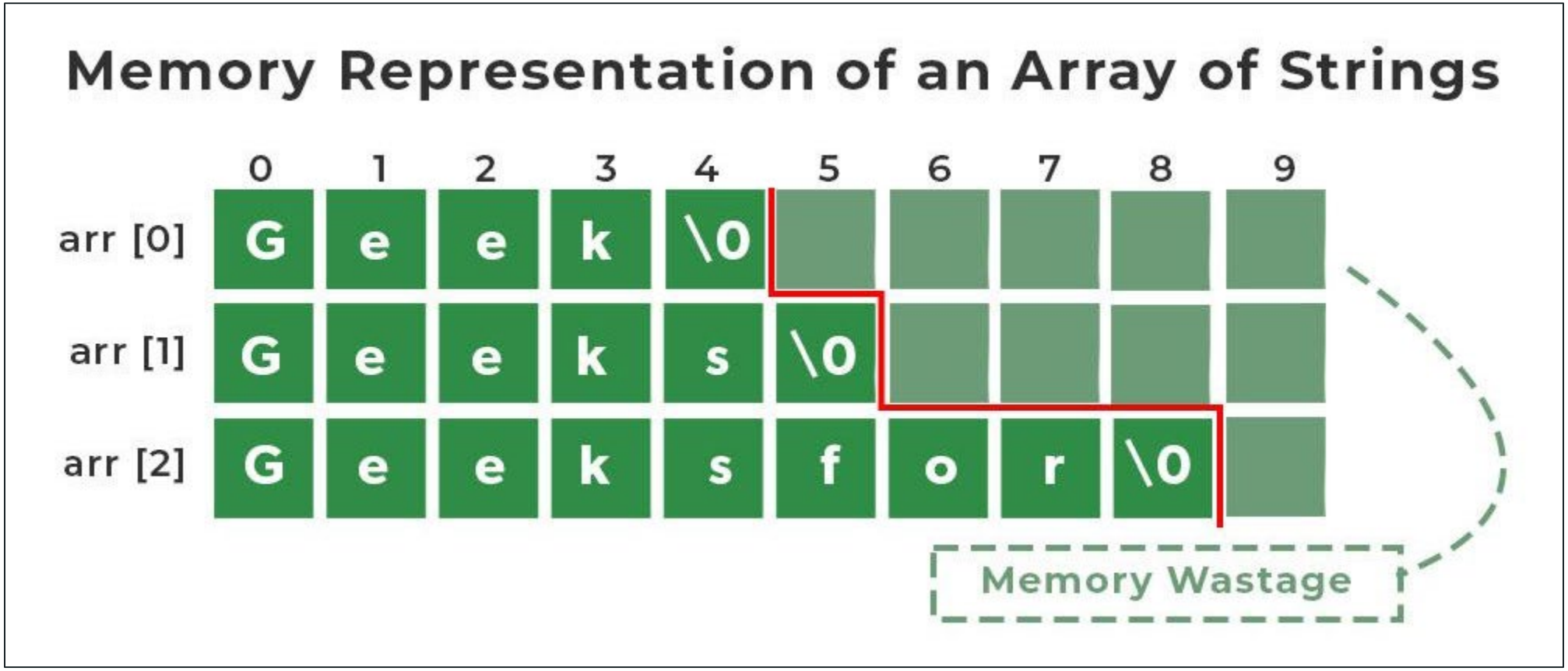
```c
void another_function() {
    int x = 1;
    // this doesn't affect the `x` in main()
}
```

And now, coding

Why is this called a ‘string’?

Source: GeeksforGeeks

Strings are stored as arrays



Source: GeeksforGeeks

And now, coding

VSCode Shortcuts

- Start with Ctrl+Shift+P
  - "Toggle Multi-Cursor Editor"
  - Convert text casing: (highlight text) → Ctrl + Shift + P → "Transform to …"
- Multiple Cursors: Ctrl + Click anywhere
  - Cursor over multiple lines vertically: Shift + Alt + Click on line
- Duplicate Line: Ctrl + Shift + Alt + Up/Down Arrow
- Move Lines: Alt + Up/Down Arrow
- Change All Occurrences: Ctrl + Shift + L or Ctrl + D
- Indentation: (Highlight line/lines) → Ctrl + Left/Right Square Bracket
- Find and Replace: Ctrl + F → (click dropdown) → Replace next