## Worksheet 6 - Methods

5<sup>th</sup> March 2020

This week, we're going to learn some of the in-built python methods

## Section 1

- 1. Write a function so that when given a string, you return that string as upper case.
- 2. Write a function which takes in a letter, and makes all capital letters lower case and all lower case letters capitals.
- 3. Write a function which takes an array arr, a variable var and a position pos, inserts var at position pos in array arr, and returns the array.
- 4. Write a function which takes an array, reverses it, and then converts it to a single string
  - e.g. ['h','e','l','l','o'] --> "olleh"
- 5. Write a function which goes through an array, and checks if each item is a letter. It should return this as a boolean array, e.g.
  - ['a', 'b', '1'] --> [True, True, False]
- 6. You're going to do some more encryption using methods! You'll be given a string str. For this string:
  - Convert each character to a number using ord()
  - For all of these numbers, add together the min, max and average values, and return
- 7. Write a function which takes a string, and returns an array of length 26 which contains how many times each letter occurs (where array[0] is how many 'a's there are, array[1] is how many 'b's etc...)
- 8. Using your last function, letter\_frequency(str), return another array, which has two elements:

The first element is the most common letter

The second element is the most common letter

If multiple letters have the same frequency, pick the one which occurs first alphabetically