

# 1 Week 6 Exercises

## 1.1 Fun with Functions

### 1.1.1 Maximal entertainment

Create a function which takes in a list and prints out the biggest value in the list (**don't** use python's `max()` function!)

**Extension 1** Instead, **return** the maximum value and print it outside of the function

### 1.1.2 Sum thing to do

Create a function which accepts a **list** of numbers and prints the **sum** of all the numbers

**Extension 1** Get your function to return the **average** value in the list (You'll want to use `len()`)

## 1.2 File I/O

### 1.2.1 Create

Create a file called **averages.txt** and store the results from the function you created in the previous exercise inside of that file.

#### Extension

Append to the file rather than overwriting by using the "a" parameter instead of "w".

### 1.2.2 Read

Read in the **poem.txt** file:

- print out the sentence created by taking
  - First word from first line
  - Second word from second line
  - etc.

*Hint:* Remember the `.split(" ")` function?

## 1.3 Challenge - Wherefore art thou paragraph

Read the **shakespeare.txt** file:

- Create a function which returns the first N paragraphs from the file
- Make use of the fact that the line preceding each paragraph contains the corresponding paragraph number

### *Hints*

1. Use a while loop to carry out `.readlines()` until you reach the end of a paragraph
2. Create a function which returns one paragraph, and put it inside another function which calls it N times