03 Practical

Basic Loops

1. Define a list of strings
2. Write a for loop that will print out each string
3. Write a while loop that will print out each string

Loops, Functions and Condition

4. Write a function called *highest_number* that will return the greatest number in a list

```
Definition
def highest_number(nums):
    # do stuff

Usage example:
>>> highest_number([59, 1, 5, 42])
59
```

5. Write a function called *happy_teacher* that will print a greeting before each student's name in the list.

```
Definition
def happy_teacher(greeting, students):
    # do stuff

Usage example:
>>> happy_teacher('Hello', ['Tom', 'Emma'])
'Hello Tom'
'Hello Harry'

>>> happy_teacher(Hey, ['Lauren', 'Max'])
'Hey Lauren'
'Hey Max'
```

Loops and Dictionaries

6. Create this data structure (list of dictionaries):

```
person = [{ 'name': 'Bob' }, { 'name': 'Jack' }, { 'name': 'Sue' }]
```

7. Loop though this printing the person names
8. Delete the student with the longest name
9. Create this structure (list of lists)

```
matrix = [ [ 2, 3 ], [5, 2] ]
```

10. What is the length of `matrix`? How would I print 5 from this? i.e. is it `matrix[1]`?