

# TPOP PRACTICAL

## ITERATION

### PRACTICAL 03 – level 0

#### **Question 1:**

Write a script that counts and prints the number of digits characters (i.e. 0,1,...,9) in a sentence. The sentence should be entered by a user.

For example, the sentence “The storming of the Bastille took place on 14 July 1789.” Should print the value 6.

**Note:** you can use the method `digit()` from the `str` type to check if a letter is a digits as shown below.

```
>>> '2'.isdigit()
True
>>> 'a'.isdigit()
False
>>>
```

#### **Question 2:**

Without using a computer (e.g. do it manually), explain what the code below is doing, and what is the value that will be printed

```
words = ['The', 'storming', 'of', 'the', 'Bastille',
         'took', 'place', 'in', '1789.']

x = 0
for aword in words:
    x = x + len(aword)

print(x)
```

**Question 3:** *Where's that bug!*

You have just started your placement, and you are given a piece of code to correct. The aim of the script is to take a 2D list (i.e. a list of lists) and print a list containing the sum of each list. For example, given the list in data, the output should be [6, 2, 10].

Modify the code below such that it gives the right result.

```
data = [[1,2,3], [2], [1, 2, 3, 4]]
output =[]
total = 0

for row in data:
    for val in row:
        total += val
        output.append(total)

print(output)
```