Lab 3.3 Strings

Introduction.

For the file names, I put the prefix lab3.3.X- in front of each of the solutions

Strings

1. Write a program (length.py) that reads in a string and outputs how long it is.

> Please enter a string:Hello
> The length of Hello is 5 characters

Answer

```
# This program reads in a String and outputs its length
# Author: Andrew Beatty

inputString = input('enter a string:')
lenghtOfString = len(inputString)
print(f'The lenght of {inputString} is {lenghtOfString }')
```

2. How would you output a string like this?

> John said   "hi"
> I said   "bye"

Answer

```
# Simple program creating and outputting a string
# Author: Andrew Beatty

message = 'John said\t"hi"\nI said\t\t"bye"'
print (message)
```

3. Write a program (normalise.py) that reads in a string and strips any leading or trailing spaces, the program should also convert the string to lower case. The program should also output the length of the input and output strings. See Python - String Methods (w3schools.com) for more information of string methods.

> Please enter a string: Some StRiNg
> That String normalised is :some string
> we reduced the input string from 57 to 11 characters

Answer

```python
# This program reads in a string and strips
# any leading or trailing spaces.
# It also converts all the letters to lower case.
# It then outputs the lengths of the original string
# and the normalised one
#
# Author: Andrew Beatty

rawString = input("please enter a string:")
normalisedString = rawString.strip().lower()

lenghtOfRawString = len(rawString)
lenghtOfNormalised = len(normalisedString)

print(f"That String normalised is :{normalisedString}")
print(f"we reduced the input string from {lenghtOfRawString} to {lenghtOfNormalised} characters")
```

Extra
4. Do the weekly task