

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 (len.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 lenght
# Author: Andrew Beatty

inputString = input('enter a string:')
lengthOfString = len(inputString)
print('The lenght of {} is {}'.format(inputString, lengthOfString))
```

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 \(w3schools.com\)](https://www.w3schools.com/python/python_string_methods.asp) 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

```
# This program reads in a string and strips
# any leading or trailing spaces.
# It also converts all the letters to lower case
# this program also outputs the length of the original string
# and the normalised one

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

lengthOfRawString = len(rawString)
lengthOfNormalised = len(normalisedString)

print("That String normalised is :{}".format(normalisedString))
print("we reduced the input string from {} to {} characters".format(
lengthOfRawString, lengthOfNormalised ))
```

Extra

4. Do the weekly task