## PRACTICAL ASSIGNMENT 1

- 1. Write a Python program to calculate the length of a string.
- 2. Write a Python program to count the number of characters (character frequency) in a string.

Sample String: google.com'

Expected Result: {'o': 3, 'g': 2, '.': 1, 'e': 1, 'l': 1, 'm': 1, 'c': 1}

3. Write a Python program to get a string made of the first 2 and the last 2 chars from a given a string. If the string length is less than 2, return instead of the empty string.

Sample String: 'informationsecurity'

Expected Result: 'inty'

Sample String: 'hp'

Expected Result: 'hphp'

Sample String: 'w'

**Expected Result: Empty String** 

4. Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '\$', except the first char itself.

Sample String: 'restart'

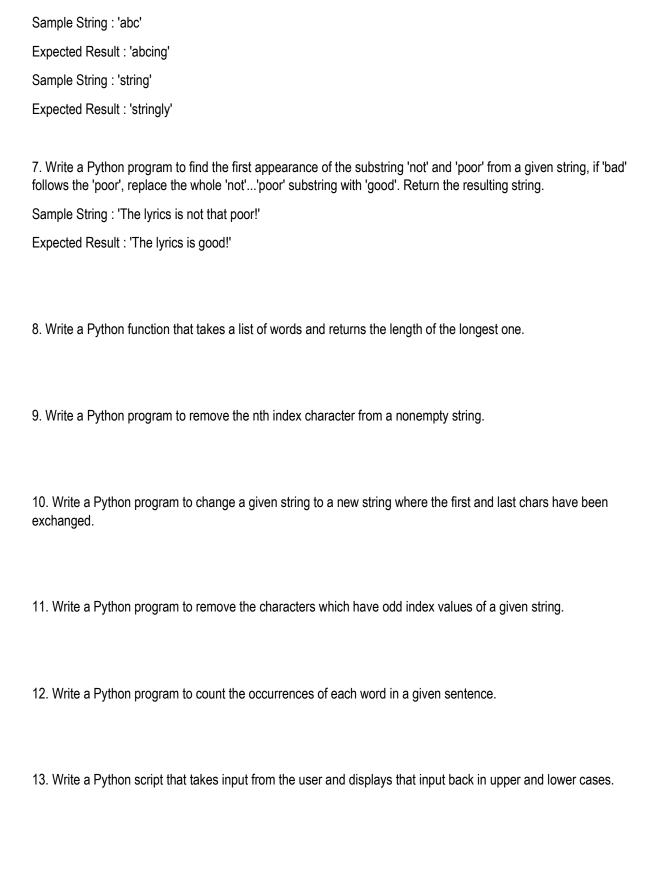
Expected Result: 'resta\$t'

5. Write a Python program to get a single string from two given strings, separated by a space and swap the first two characters of each string.

Sample String: 'abc', 'xyz'

Expected Result: 'xyc abz'

6. Write a Python program to add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged.



14. Write a Python program that accepts	a comma s	separated	sequence	of words	as input a	and prints	the uni	que
words in sorted form (alphanumerically).								

Sample Words: red, white, black, red, green, black

Expected Result : black, green, red, white,red

15. Write a Python function to create the HTML string with tags around the word(s).

Sample function and result:

16. Write a Python function to insert a string in the middle of a string.

Sample function and result:

insert\_sting\_middle('[[]]<<>>', 'Python') -> [[Python]]

insert\_sting\_middle('{{}}', 'PHP') -> {{PHP}}

17. Write a Python function to get a string made of 4 copies of the last two characters of a specified string (length must be at least 2).

Sample function and result:

insert\_end('Python') -> onononon

insert\_end('Exercises') -> eseseses

18. Write a Python function to get a string made of its first three characters of a specified string. If the length of the string is less than 3 then return the original string.

Sample function and result :

first\_three('ipy') -> ipy

first\_three('python') -> pyt

19. Write a Python function to get the first half of a specified string of even length.
Sample function and result :
string_first_half('Python') -> Pyt
20. Write a Python function to reverses a string if it's length is a multiple of 4.
21. Write a Python function to convert a given string to all uppercase if it contains at least 2 uppercase characters in
the first 4 characters.
22.Write a Python program to sort a string lexicographically.
23. Write a Python program to remove a newline in Python.
24. Write a Python program to check whether a string starts with specified characters.
25. Write a Python program to create a Caesar encryption.