**ASSIGNMENT-1**

**1.** Write a Python program to calculate the length of a string. 

str='Tejinder  
print('length:',len(str))

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

str='Gharial'  
x=str.count('e',0)  
print('e:',x)

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.

str='Tejinder'  
if len(str) < 3:  
 print("")  
else:  
 ns=str[:3]+str[-:]  
print(ns)

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. 

str = 'Restart'  
str = str.replace('r', '$')  
print('new version of string::')  
print(str)

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

a = 'Iamthebest'  
print(a)  
if (a[0] == 'I'):  
 print('It has sepecific character')  
else:  
 print('Not')

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.

def add\_string(str1):  
 length = len(str1)  
 if length > 2:  
 if str1[-3:] == 'ing':  
 str1 += 'ly'  
 else:  
 str1 += 'ing'  
 return str1  
print(add\_string('ab'))  
print(add\_string('abc'))  
print(add\_string('string'))

7. Write a Python program to find the first appearance of the substring 'not' and 'poor' from a given string, if 'not' follows the 'poor', replace the whole 'not'...'poor' substring with 'good'. Return the resulting string.   
Sample String : 'The lyrics is not that poor!'

def not\_poor(str1):  
 snot = str1.find('not')  
 spoor = str1.find('poor')  
 if spoor > snot and snot > 0 and spoor > 0:  
 str1 = str1.replace(str1[snot:(spoor + 4)], 'good')  
 return str1  
 else:  
 return str1  
print(not\_poor('The lyrics is not that poor!'))  
print(not\_poor('The lyrics is poor!'))

8. Write a Python function that takes a list of words and return the longest word and the length of the longest one.

a = ['you', 'are', 'beautiful']  
maxx = len(a[0])  
temp = a[0]  
for i in a:  
 if (len(i) > maxx):  
 maxx = len(i)  
 temp = i  
print('the longest word is', temp)  
print('length of word is', maxx)

9. **.** Write a Python program to remove the nth index character from a nonempty string. 

str = 'life isfun'  
n = 4  
  
modify\_str = ''  
for char in range(0, len(str)):  
 if (char != n):  
 modify\_str += str[char]  
print("modify the string after remove ", n)  
print(modify\_str)

10. Write a Python program to change a given string to a new string where the first and last chars have been exchanged

string = input("Enter a string :-")  
new\_str = string[-1] + string[1:-1] + string[0]  
print(new\_str)

11. Write a Python program to remove the characters which have odd index values of a given string. 

str1 = 'i am the best'  
str2 = ""  
for i in range(len(str1)):  
 if (i % 2 == 0):  
 str2 = str2 + str1[i]  
print('previous string:', str1)  
print('new string', str2)

12. **.** Write a Python program to count the occurrences of each word in a given sentence. 

str=len('life is very beautiful'.split())  
print('count the given words: ',str)

13. Write a Python script that takes input from the user and displays that input back in upper and lower cases

str = input('enter any string: ')  
print(str.upper())  
print(str.lower())

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

str = input('enter any input: ')  
str2 = str.split(',')  
str2.sort()  
print(',').join(str)

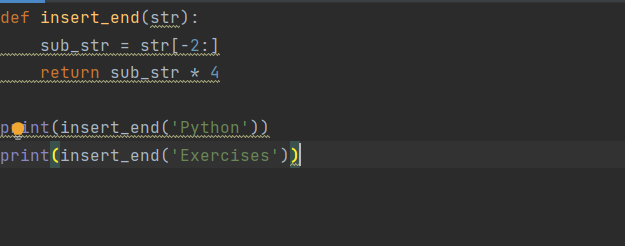
15. Write a Python function to create the HTML string with tags around the word(s).

def add\_tags(tag, word):  
 return "<%s>%s</%s>" % (tag, word, tag)  
print(add\_tags('i', 'Tejinderpal'))  
print(add\_tags('b', 'Singh'))

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

test\_str = 'Tejinder gharial'  
  
# printing original string  
print("The original string is : " + str(test\_str))  
  
# initializing mid string  
mid\_str = "love to"  
  
# splitting string to list  
temp = test\_str.split()  
mid\_pos = len(temp) // 2  
  
# appending in mid  
res = temp[:mid\_pos] + [mid\_str] + temp[mid\_pos:]  
  
# conversion back  
res = ' '.join(res)  
  
# printing result  
print("Formulated String : " + str(res))

17. Write a Python function to get a string made of 4 copies of the last two characters of a specified string



18.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.

a = 'python'  
if (len(a) > 3):  
 print(a[:3])  
else:  
 print(a)

19.program to get the last part of a string before a specified character

20.Python function to reverses a string if it's length is a multiple of 4

a = 'pythonclass'  
if (len(a) % 4 == 0):  
 print(a[::-1])  
else:  
 print(a)

21.Python function to convert a given string to all uppercase if it contains at least 2 uppercase characters in the first 4 characters\

a = 'Tejinder'  
num = 0  
for x in a[:4]:  
 if (x.upper() == x):  
 num += 1  
if (num >= 2):  
 print(a.upper())  
else:  
 print(a)

22.Python program to remove a newline in Python

a = 'python class\n'  
print(a)  
print(a.rstrip())  
print(a)

23.Python program to check whether a string starts with specified characters.

a = 'Tejinder'  
print(a.startswith('Pr'))