A-5 Write a Python program to compute following operations on String:

a) To display word with the longest length

b) To determines the frequency of occurrence of particular character in the string

c) To check given string is palindrome or not

d) To display index of first substring

To count the occurrences of each word in string

| def In(element, list1): |
| --- |
|  | flag =0 |
|  | for i in range(len(list1)): |
|  | if element == list1[i]: |
|  | flag = 1 |
|  | if flag == 1: |
|  | return True |
|  | else: |
|  | return False |
|  |  |
|  | def first\_appe(string, substring): |
|  | flag=0 |
|  | for i in range(len(substring)): |
|  | if In(substring[i], string): |
|  | flag +=1 |
|  | if flag==len(substring): |
|  | for i in range(len(string)): |
|  | if substring[0]==string[i]: |
|  | return i |
|  | return 0 |
|  |  |
|  | # Function to reverse the given string---------------------------------->> |
|  | def revstr(string): |
|  | revstr="" |
|  | for i in range(len(string)): |
|  | revstr=string[i]+revstr |
|  | return revstr |
|  |  |
|  | # Function to count the length of given string-------------------------->> |
|  | def str\_count(str1, char): |
|  | count=0 |
|  | for i in range(len(str1)): |
|  | if char==str1[i]: |
|  | count+=1 |
|  | return count |
|  |  |
|  | # Function to find word with longest length----------------------------------->> |
|  | def max\_len(splitL): |
|  | global new\_str2 |
|  | len1=0 |
|  | new\_str1="" |
|  | for i in range (len(splitL)): |
|  | if len1 < len(splitL[i]): |
|  | len1=len(splitL[i]) |
|  | new\_str2=new\_str1+splitL[i] |
|  | return len1 |
|  |  |
|  | # Function to check given string is palindrome or not without reversing string-->> |
|  | def is\_palindrome(str): |
|  |  |
|  | for i in range(0, int(len(str)/2)): |
|  |  |
|  | if str[i] != str[len(str)-i-1]: |
|  |  |
|  | return False |
|  |  |
|  | return True |
|  |  |
|  | str1= input("Enter string to check palindrome:- ") |
|  |  |
|  | if is\_palindrome(str1): |
|  | print ("Entered string is palindrome") |
|  | else: |
|  | print("Entered string is not palindrome") |
|  |  |
|  | # Palindrome checking using reverse string method----------------->> |
|  | if revstr(str1)==str1: |
|  | print("Entered string is palindrome(using reverse string method)") |
|  | else: |
|  | print("Entered string is not a palindrome(Using reverse string method)") |
|  | str2= input("Enter sentence to check maximum length of word:") |
|  | new=str2.split() |
|  | print ("Length: ",max\_len(new), "Word: ",new\_str2) |
|  | str3= input ("Enter string to check perticular character count:") |
|  | ch=input ("Enter character: ") |
|  | print("Entered character count is: ",str\_count(str3, ch)) |
|  |  |
|  | str4 = input("Enter string to check first appearance of substring: ") |
|  | substring= input("Enter substring: ") |
|  | print(substring, "is at index: ", first\_appe(str4, substring)) |