# 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 whether given string is palindrome

# d) To display index of first appearance of the substring

# e) To count the occurrences of each word in a given string.

**Programming Code:**

#To display word with longest length

print("To display word with the longest length.")

str1 = input("Enter the string: ")

list1 = str1.split()

m = 0

word = 0

print(list1)

for i in range (len(list1)):

len(list1[i])

if m < len(list1[i]):

m = len(list1[i])

word = i

print("The word with longest length: ",list1[word])

#To determines the frequency of occurrence of particular character in the string

print("To determine the frequency of occurrence of particular character in the string.")

x = input("Enter the string: ")

y = input("Enter the character: ")

a = 0

for i in range (len(x)):

if y == x[i]:

a = a + 1

print("The occurrence of '", y ,"' in '", x , "' is ", a)

#To check whether given string is palindrome or not

print("To check whether given string is palindrome or not.")

a = input("Enter sentence / string: ")

if a[0::] == a[::-1]:

print("It is palindrome string / sentence.")

else:

print("It is Not a Palindrome String / Sentence.")

#To display index of first appearance of the substring

print("To display index of first appearance of the substring.")

a = input("Enter the string: ")

b = input("Enter the substring: ")

sublen = len(b)

x = 0

y = 0

for i in range (len(a)):

if b[y] == a[i]:

flag = 1

print(a[y], i, y)

y = y + 1

if y == sublen:

x = i - (sublen - 1)

break

else:

flag = 0

y = 0

print("Substring index is: ", x)

#To count the occurrences of each word in a given string

print("To count the occurrences of each word in a given string.")

a = input("Enter the string: ")

counts = dict()

words = a.split()

for i in words:

if i in counts:

counts[i] += 1

else:

counts[i] = 1

print(counts)