

Assignment3_Group A

""""

Write a python program to compute following operations on String:

- a) To display word with the longest length
- b) To determine the frequency of occurrence of particular character in the string
- c) To count the occurrences of each word in a given string
- d) To check whether given string is palindrome or not
- e) To display index of first appearance of the substring

""""

#To display word with the longest length

```
str1=input("Enter the string To display word with the longest length: \n")
```

```
# svpm coe malegaon
```

```
list1=str1.split()
```

```
m=0
```

```
word=0
```

```
print(list1)  #['svpm', 'coe', 'malegaon']
```

```
for i in range(len(list1)):
```

```
    if m<len(list1[i]):
```

```
        m=len(list1[i])
```

```
        word=i
```

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

```
# The word with longest length:- malegaon
```

To determine the frequency of occurrence of particular character in the string

```
str1 = input("Enter the string to count frequency of occurrence of particular character: \n")
```

```
# india
```

```

char = input("Enter character:- ")

# i

counter = 0

for i in range(len(str1)):

    if char == str1[i]:

        counter += 1

print("Character ",char," is present ",counter," times in string ",str1)

```

To count the occurrences of each word in a given string

```

str1 = input("Enter input string To count the occurrences of each word: \n")

# Ram is good , Ram is intelligent

list1 = str1.split()

#[ 'Ram', 'is', 'good', ',', 'Ram', 'is', 'intelligent']

list2 = set(list1)

list3 = list(list2)

#[ 'good', ',', 'intelligent', 'is', 'Ram']

print(list1)

print(list3)


list4 = []

list5 = []

counter = 0

for i in range(len(list3)):    [ 'good', ',', 'intelligent', 'is', 'Ram'] #single element

    counter = 0

    for j in range(len(list1)):    #[ 'Ram', 'is', 'good', ',', 'Ram', 'is', 'intelligent'] # all element

```

```
    if list3[i] == list1[j]:  
        counter += 1  
  
    list4 = list3[i], counter  
  
    list5.append(list4)  
  
print("\n", list5)  
  
#[('good', 1), ('', 1), ('intelligent', 1), ('is', 2), ('Ram', 2)]
```

To check whether given string is palindrome or not

```
a = input("Enter string is palindrome or not: \n")  
  
c=a[ : :-1]      #reverse  
  
if (c==a):  
    print("string a is palindrome")  
  
else:  
    print("string a is not palindrome")
```

To display index of first appearance of the substring

```
str1 = input("Enter the string To display index of first appearance of the substring:- \n")  
  
sub1 = input("Enter substring:- \n")  
  
index=str1.find(sub1)  
  
sublen = len(sub1)  
  
print("substring index :", index)
```

.....

Output

a)Enter the string To display word with the longest length

svpm coe malegaon

```
['svpm', 'coe', 'malegaon']
```

The word with longest length:- malegaon

b)Enter the string to count frequency of occurrence of particular character

banana

Enter character:- a

Character a is present 3 times in string banana

c)Enter input string To count the occurrences of each word

Ram is good , Ram is intelligent

```
['Ram', 'is', 'good', ',', 'Ram', 'is', 'intelligent']
```

```
['good', ',', 'intelligent', 'is', 'Ram']
```

```
[('good', 1), (',', 1), ('intelligent', 1), ('is', 2), ('Ram', 2)]
```

d)Enter stringis palindrome or not

nitin

It is palindrome

e)Enter the string To display index of first appearance of the substring:-

Ram is good boy

Enter substring:-

is

substring index : 4
