

Kalyani Government Engineering College

Department of Computer Application
Python Programming Lab – MCAN191
Year: 2023-2024
Semester: 1st Semester
Assignment 4
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4.1 Write a program that accepts a string from user. Your program should count and display number of vowels in that string.

Code:

```
l="aeiouAEIOU"
d=dict()
x=input("Enter the string\n")

for c in x:
    if c in l:
        if c not in d:
            d[c]=1
        else:
            d[c]=d[c]+1

print("Number of vowels : ")
for key in d:
    print(key,"->",d[key])
```

Output:

```
Enter the string
Madhusudan
Number of vowels :
a -> 2
u -> 2
```

4.2 Write a program that reads a string from keyboard and display:

The number of uppercase letters in the string
The number of lowercase letters in the string
The number of digits in the string
The number of whitespace characters in the string.

Code:

```

x=input("Enter the string\n")
upper = lower = number = symbol = 0
for c in x:
    if c.isupper():
        upper+=1
    elif c.islower():
        lower+=1
    elif c.isnumeric():
        number+=1
    else:
        symbol+=1
print("Uppercase : ",upper,"\nLowercase : ",lower,"\nNumber : ",number,
"\nSymbol : ",symbol)

```

Output:

```

Enter the string
Madhusudan@kgec'25
Uppercase :  1
Lowercase :  13
Number :  2
Symbol :  2

```

4.3 Write a Python program that accepts a string from user. Your program should create and display a new string where the first and last characters have been exchanged. For example if the user enters the string 'HELLO' then new string would be 'OELLH'.

Code:

```

x=input("Enter the string\n")
t=list(x)
j=""
t[0] , t[-1] = t[-1] , t[0]
j=j.join(t)
print("First and last characters have been exchanged ",j)

```

Output:

```

Enter the string
Madhuusdan
First and last characters have been exchanged  nadhuusdaM

```

4.4 Write a Python program that accepts a string from user. Your program should create a new string in reverse of first string and display it. For example if the user enters the string 'EXAM' then new string would be 'MAXE'

Code:

```
x=input("Enter the string\n")  
  
print("Reverse of string ",x[::-1])
```

Output:

```
Enter the string  
Enter the string  
Madhusudan  
Reverse of string  nadusuhdaM
```

4.5 Write a Python program that accepts a string from user. Your program should create a new string by shifting one position to left. For example if the user enters the string 'examination 2021' then new string would be 'xamination 2021e'

Code:

```
x=input("Enter the string\n")  
  
t=list(x)  
  
t.append(x[0])  
t.pop(0)  
print("New string shifting one position to left","".join(t))
```

Output:

```
Enter the string  
examination 2021  
New string shifting one position to left xamination 2021e
```