

Netaji Subhash Engineering College
Department of Computer Science & Engineering
B. Tech CSE 2nd Year 3rd Semester
2021-2022

Name of the Course: IT Workshop

Course Code: PCC-CS393

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Class Roll No.: 3

University Roll No.: 10900120003

Date of Experiment: 19/11/2021

Date of Submission: 24/11/2021

▪ **Assignment No.:** 21

Problem Statement: Write a program to count the number of each vowel in a sentence.

Python Code:

```
vowels = 'aeiou'

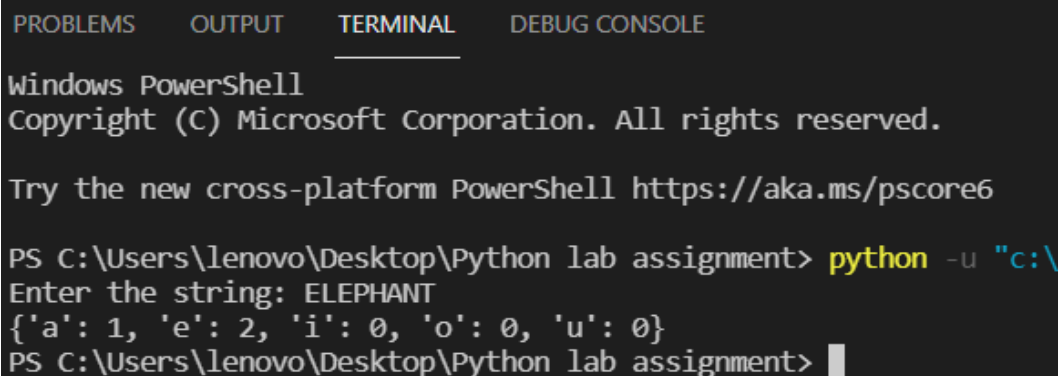
ip_str = input('Enter the string: ')

ip_str = ip_str.casefold()

count = {}.fromkeys(vowels,0)

for char in ip_str:
    if char in count:
        count[char] += 1
print(count)
```

Sample Output(s):



```
PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\lenovo\Desktop\Python lab assignment> python -u "c:\
Enter the string: ELEPHANT
{'a': 1, 'e': 2, 'i': 0, 'o': 0, 'u': 0}
PS C:\Users\lenovo\Desktop\Python lab assignment> █
```

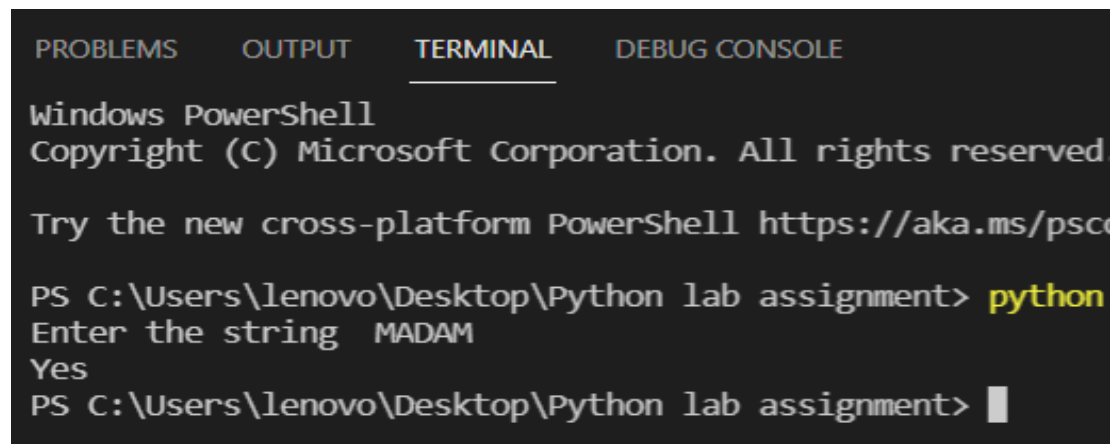
▪ **Assignment No.: 22**

Problem Statement: Write a program to read a string and check whether the string is a palindrome or not.

Python Code:

```
x = input('Enter the string ')
w = ""
for i in x:
    w = i + w
if (x == w):
    print("Yes")
else:
    print("No")
```

Sample Output(s):



The screenshot shows a Windows PowerShell terminal window with the following content:

```
PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/powershell

PS C:\Users\lenovo\Desktop\Python lab assignment> python
Enter the string  MADAM
Yes
PS C:\Users\lenovo\Desktop\Python lab assignment> █
```

• **Assignment No.: 23**

Problem Statement: Write a program to get a string from a given string where all occurrences of the last character have been changed to '*', except the last character.

Python Code:

```
def change_char(str1):
    char = str1[0]
    str1 = str1.replace(char, '*')
    str1 = char + str1[1:]

    return str1
x=input("Enter the string: ")
print(change_char(x))
    greater += 1

print("The L.C.M.of",x,"and",y,"is", lcm)
```

Sample Output(s):

```
PS C:\Users\lenovo\Desktop\Python lab assignment> python
Enter the string: restart
resta*t
PS C:\Users\lenovo\Desktop\Python lab assignment> █
```

Assignment No.: 24

Problem Statement: Write a program to count the occurrences of a word in a given sentence.

Python Code:

```
def countOccurrences(str, word):

    a = str.split(" ")

    count = 0
    for i in range(0, len(a)):

        if (word == a[i]):
            count = count + 1

    return count

str =input("Enter the string: ")
word =input("Enter the word: ")
print(countOccurrences(str, word))
```

OUTPUT –

```
Windows PowerShell
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PS C:\Users\lenovo\Desktop\Python lab assignment> python -u "c:\Us
Enter the string: This is the is this
Enter the word: is
2
PS C:\Users\lenovo\Desktop\Python lab assignment> █
```

Assignment No.: 25

Problem Statement: Write a program to get all substrings of a given string.

Python Code:

```
def subString(Str,n):

    for Len in range(1,n + 1):

        for i in range(n - Len + 1):

            j = i + Len - 1

            for k in range(i,j + 1):
                print(Str[k],end="")
            print()

Str = input('Enter the string: ')
subString(Str,len(Str))
```

Sample Output(s):

```
PS C:\Users\lenovo\Desktop\Python lab assignment> python -u "c:
Enter the string: POLO
P
O
L
O
PO
OL
LO
POL
OLO
POLO
PS C:\Users\lenovo\Desktop\Python lab assignment> █
```

Assignment No.: 26

Problem Statement: Write a program to detect whether two strings are anagrams or not.

Python Code:

```
def areAnagram(str1, str2):

    n1 = len(str1)
    n2 = len(str2)

    if n1 != n2:
        return 0
    str1 = sorted(str1)
    str2 = sorted(str2)
```

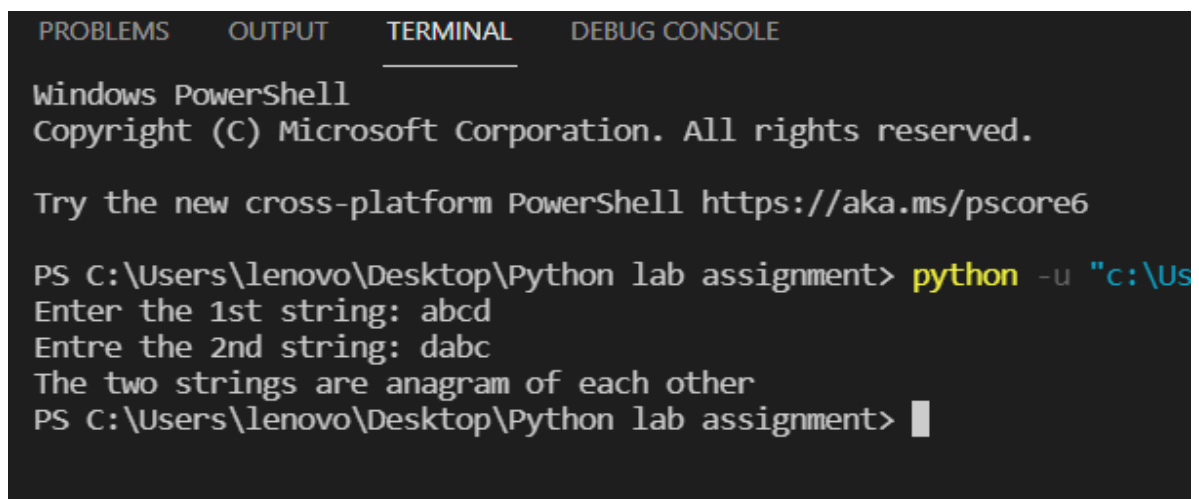
```

        for i in range(0, n1):
            if str1[i] != str2[i]:
                return 0
        return 1
str1 = input("Enter the 1st string: ")
str2 = input("Entre the 2nd string")

if areAnagram(str1, str2):
    print("The two strings are anagram of each other")
else:
    print("The two strings are not anagram of each other")

```

Sample Output(s):



The screenshot shows a Windows PowerShell terminal window with the following content:

```

PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE

Windows PowerShell
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PS C:\Users\lenovo\Desktop\Python lab assignment> python -u "c:\Us
Enter the 1st string: abcd
Entre the 2nd string: dabc
The two strings are anagram of each other
PS C:\Users\lenovo\Desktop\Python lab assignment>

```

-----**END**-----

