

SONA COLLEGE OF TECHNOLOGY

(AUTONOMOUS)

**B.E / B. Tech DEGREE SEMESTER END PRACTICAL
EXAMINATIONS, DEC 2020 – JAN 2021**

REGISTER NUMBER	:	1	5	1	8	1	0	2	1	0	6
SUBJECT CODE	:	U15CS506R									
SUBJECT NAME	:	PYTHON PROGRAMMING LABORATORY									
DATE	:	0	7	/	0	1	/	2	0	2	1
BATCH	:	3									

TYPE OR COPY / PASTE YOUR ALLOTTED QUESTION DOWN HERE IN THE BOX GIVEN BELOW

i. Given a number N and an array of N strings, sort the strings based on the number of vowels in each of the strings in descending order.

Input Size : $N \leq 1000$

Sample Testcase :

INPUT

3

Vishal

Aaa

Awqr

OUTPUT

Aaa

Vishal

Awqr

ii. Swagger and Rock are playing a word game. They need to check the two strings use the same base alphabets. Two strings are said to have same base alphabets if they use the same characters to form the word. eg: rescue and curse have same base alphabets - c,e,r,s,u.

Input Size : $|S| \leq 1000000$

Sample Testcase :

INPUT

rescue curse

nail snail

OUTPUT

true

String Sort Vowel in descending

Aim:

To write a given number N and an array of N string, sort the string based on the number of Vowel in each of the string in descending order.

Algorithm:

Step 1: start

Step 2: get the number of test case as input

Step 3: Run the for loop for the string to store in list

Step 4: Pass to sort function and count the Vowels and sort the string

Step 5: print the given string in the sorted order

Step 6: Stop

Program:

```
def isVowel(ch):  
    ch = ch.upper();  
    return (ch == 'A' or ch == 'E' or ch == 'I' or  
            ch == 'O' or ch == 'U')  
  
def CountVowels(string):  
    Count = 0;  
    for i in range(len(string)):  
        if (isVowel(string[i])):  
            Count += 1  
  
    return Count  
  
def SortArr(arr, n):  
    Vp = [];  
    for i in range(n)  
        Vp.append((CountVowels(arr[i]), arr[i]));  
    Vp.sort()  
    for i in range(len(Vp)-1, -1, -1):  
        print(Vp[i][1]).  
  
t = int(input())  
arr = []  
for i in range(t):  
    st = input()  
    arr.append(st)  
  
n = len(arr)  
SortArr(arr, n)
```

Output :

3

Vishal

Aaee

Awqr

Aaee

Vishal

Awqr

Result :

Thus, the Program is executed successfully
and output is verified.

check string has same base
Alphabets.

Aim:

To write a program to check two string are
having same base alphabets.

Algorithm:

Step 1: Start

Step 2: get the input of two string using
map and set

Step 3: Print 'true' if s_1 and s_2 are equal

Step 4: Print 'false' if s_1 and s_2 are not
equal

Step 5: Stop.

Program:

```
s1, s2 = map(set, input().split())
```

```
if (s1 == s2):
```

```
    Print('true')
```

```
else:
```

```
    Print('false')
```

Output :

rescue case

true.

Result :

Thus, the program is executed and the output is verified successfully.