Narmadha
S
240801216

ECE D

Problem Statement:1 Givenastring,s,consisting ofalphabetsanddigits,find the frequency of each digit in the given string. Input Format The first line contains astring, numwhich isthegiven number. Constraints 16 len(num)s 1000 Allthe elements of num are made of English alphabets and digits.
OutputFormat Print tenspace-separatedintegers inasinglelinedenoting the frequency of each digit from 0 to 9. SampleInput 0 a11472o5t6 Sample Output00210111100 Explanation OInthegivenstring:•1occurstwotimes.
• 2,4, 5,6and7occur onetimeeach.•Theremaining digits 0,3, 8and 9don't occur atall.Hint:•Declare anarray, freqof size10 and initialize it withzeros, which willbeused tocount thefrequencies ofeach of thedigitoccurring. • Given astring, s,iterate through each of thecharacter inthestring. Checkifthe current character is a number or not.

• Ifthecurrentcharacterisanumber,increasethefrequencyofthat positioninthefreq
arrayby1.
• Oncedonewiththeiterationoverthestring,s,inanewlineprintallthe10 frequencies
startingfrom0to9,separatedbyspaces.

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()

-charstrIBB0]; 5
sc9r?('-",                    ;
inc hasn{ie}{e,0,e,0,0,e,8,e,e,e};

    :r(i,ii-e;str{i}'.9';i.-)

Otemp-str[i]'e';
if(temp-9-.?terg-8)

1*hash{temp}-.;
1-}

Gf:•(inti=e,i-9,i-)
{
printf("%d ",hash[i]);
}
re-urn 0;
}
```

	Input	Expected	Got
✓	zIId22cSIt	d2IS11Il0bd2Id12I10dV	
✓	I'+5ddbGI%ñ633bar8ekkIII2012d,0III2 01?0td		

Passedalitests!

ProblemStatement:2
Today, Monk went fora walk ina garden.There are many trees in the garden and each

treehasanEnglishalphabet onit.While Monk was walking, henoticed that all trees with vowels on itarenot in good state. Hedecided to take care of them. So, he asked you to tellhim the count of such trees in the garden. Note: The following letters are vowels: 'A', 'E', 'I', 'O', 'U', 'a', 'e', 'i', 'o' and 'u'. Input Format: The first line consists of an integer T denoting the number of test cases. Each test case consists of only one string, each character of string denoting the alphabet (may be lowercase or uppercase) on a tree in the garden. Output Format: For each test case, print the count in a new line. Constraints: 16T610 1 s length of string s 105 Sample Input 2 nBBZLaosnm JHkIsnZtTL Sample Output 21 Explanation Intest case 1,aand o are the only vowels. So, count=2 Brief Description: Given a string S you have to count number of vowels in the string. Solution 1: For each vowel, count how many times it is appearing in the string S.Finalanswer willthe sumof frequencies of all the vowels. Solution 2: Iterate overall all the characters in the string S and use a counter (variable) to keep track

of number of vowels in the string S.While iterating over the characters,if weencountera vowel,wewillincreasethecounterby1.
TimeComplexity:O(N)whereNisthelengthofthestringS.Space Complexity:O(N)

```c
#include<stdio.h>
int main()
{
    int t;
    scanf("%d",&
    while(t--)

        char str[100000];
        int count=0;
        scanf("%s",str);
        for(int i=0;str[i]!='\0';i++)

            char c=str[i];
            if((c=='a')||(c=='e')||(c=='i')||(c=='o')||(c=='u')||(c=='A')||(c=='E')||(c=='I')||(c=='O')||(c=='U'))
            count++;

        printf("%d\n",count);

n       retv•0;
```

Input ExpectedGot

Passedaiests!

ProblemStatement:3
Givenasentence, s,printeachwordofthesentenceinanewline.
Input Format
Thefirstandonlylinecontains asentence, s.
Constraints
1 6 len(s) 6 1000
Output Format

Printeachwordofthesentenceinanewline.

Sample Input This is C Sample Output This is C Explanation In the given string,therearethreewords ["This","is","C"].Wehave toprinteachofthese wordsinanewline.HintHere,onceyouhavetakenthesentenceasinput,we needtoiteratethroughtheinput,andkeepprintingeachcharacteroneafter theotherunlessyouencounteraspace.Whenaspaceisencountered,you knowthatatokeniscompleteandspaceindicatesthestartofthenexttoken afterthis.So,whenever thereisaspace,youneedtomovetoanewline,so thatyoucanstartprintingthenexttoken.

```
1  cinc1ude‹stdio.h›
2  1ntmain()

4      chars[1006a;
       scan-("'‹']s",s);
6      for(inti-0;s{i]-"G';i--)

8          if(s[i]!=' ')
           printf("%c" s
10

           else

12     \
13     return0;
```

Input	Expected	Got	
ThisisC	Th1 s is	This is	✔
t.earnsrgCisRunLearning	Learning		

ProblemStatement:4
InputFormat
Youaregiventwostrings,aandb,separatedbyanewline.Eachstringwill consist of
lower-caseLatincharacters('a'-'z').
OutputFormat
Inthefirstlineprinttwospace-separatedintegers,representingthelength of a and b
respectively.
Inthesecondlineprintthestringproducedbyconcatenatingaandb(a+ b).
Inthethirdlineprinttwostringsseparatedbyaspace,a'andb'.a'andb' are the same as
aandb,respectively,exceptthattheirfirstcharactersareswapped.

Sample Input
abcd ef
Sample Output

42
abcdef ebcd
af Explanation
a = "abcd"b="ef"
|a|=4|b|=2a
+b="abcdef"a'
= "ebcd" b' =
"af"

```
y    zncZuda<stdto.h>
2Intaa1n‹)

4       charstrl(10],str2[l8],t,

6       Intcent1-e,count2w,
7       scanf("gs",strl},
8       scanf("gs"str2),
9       whfLe{scrz[l]!•\e')


12          i++;

14      whiletr2{j]!=\0')
15      {
16          count2++;
17          j++;

19      printf('Xd%d\n",count2,countZ);
2e      pr1ntf("¥s¥s\n",strl,str2),

22      stri€j=trQe,
23      str2[0]=t,
J4      printf('Isls"str1,str,
25      return6,
26  }
```

		Expected		
		ebcdaf	ebcdef	