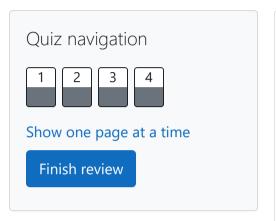
GE23131-Programming Using C-2024





Question 1

Correct

Marked out of 1.00

▼ Flag question

Given a string, \mathbf{s} , consisting of alphabets and digits, find the frequency of each digit in the given string.

Input Format

The first line contains a string, *num* which is the given number.

Constraints

$1 \leq len(num) \leq 1000$

All the elements of num are made of English alphabets and digits.

Output Format

Sample Input 0

a11472o5t6

Sample Output 0

0210111100

Explanation 0

In the given string:

- · **1** occurs two times.
- . **2, 4, 5, 6** and **7** occur one time each.

The remaining digits 0, 3, 8 and 9 don't occur at all.

Answer: (penalty regime: 0 %)

```
1
 2
   #include<stdio.h>
4 v int main(){
        char str[1000];
 5
        scanf("%s",str);
        int h[10]={0,0,0,0,0,0,0,0,0,0,0,};
        int temp;
        for(int i=0;str[i]!='\0';i++){
9 •
            temp=str[i]-'0';
10
            if(temp<=9 && temp>=0){
11 🔻
12
                h[temp]++;
```

```
16 | printt("%d ",n[i]);
17 | }
18 | return 0;
19 |}
```

	Input	Expected	Got	
~	a11472o5t6	0 2 1 0 1 1 1 1 0 0	0 2 1 0 1 1 1 1 0 0	~
~	lw4n88j12n1	0210100020	0 2 1 0 1 0 0 0 2 0	~
~	1v888861256338ar0ekk	1 1 1 2 0 1 2 0 5 0	1 1 1 2 0 1 2 0 5 0	~

Passed all tests! <

Question ${\bf 2}$

Correct

Marked out of 1.00

Flag question

Today, Monk went for a walk in a garden. There are many trees in the garden and each tree has an English alphabet on it. While Monk was walking, he noticed that all trees with vowels on it are not in good state. He decided to take care of them. So, he asked you to tell him 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:

The first line consists of an integer *T* denoting the number of test cases.

Output: **Constraints**: $1 \le T \le 10$ 2 nBBZLaosnm JHklsnZtTL 2

alphabet (may be lowercase or uppercase) on a tree in the garden.

For each test case, print the count in a new line.

 $1 \le length of string \le 10^5$

SAMPLE INPUT

SAMPLE OUTPUT

Explanation

In test case 1, a and o are the only vowels. So, count=2

```
#include<stdio.h>
    int main(){
        int t;
 5
        scanf("%d",&t);
        while(t--){
 7 1
            char str[100000];
            int c0=0;
 9
            scanf("%s",str);
10
            for(int i=0;str[i]!='\0';i++){
11 🔻
                char c=str[i];
12
                if((c=='a') || (c=='e') || (c=='i') || (c=='o') || (c=
13
14
                c0++;
15
            printf("%d\n",c0);
16
17
18
        return 0;
19
```

	Input	Expected	Got	
~	2 nBBZLaosnm JHkIsnZtTL	2	2	~
~	2 nBBZLaosnm JHkIsnZtTL	2	2	~

Passed all tests! <

Marked out of 1.00 Flag question

Input Format

The first and only line contains a sentence, s.

Constraints

 $1 \leq len(s) \leq 1000$

Output Format

Print each word of the sentence in a new line.

Sample Input 0

This is C

Sample Output 0

This

is

C

Explanation 0

```
Answer: (penalty regime: 0 %)
```

```
1
   #include<stdio.h>
 2
 3 v int main(){
        char s[1000];
 4
        scanf("%[^\n]s",s);
 5
        for(int i=0;s[i]!='\0';i++){
            if(s[i]!=' ')
 7
            printf("%c",s[i]);
 8
 9
            else
            printf("\n");
10
11
12
        return 0;
13 }
```

	Input	Expected	Got	
~	This is C	This is C	This is C	~
~	Learning C is fun	Learning C is fun	Learning C is fun	~

Question **4**

Correct

Marked out of 1.00

Flag question

Input Format

You are given two strings, \boldsymbol{a} and \boldsymbol{b} , separated by a new line. Each string will consist of lower case Latin characters ('a'-'z').

Output Format

In the first line print two space-separated integers, representing the length of \boldsymbol{a} and \boldsymbol{b} respectively.

In the second line print the string produced by concatenating \boldsymbol{a} and \boldsymbol{b} ($\boldsymbol{a} + \boldsymbol{b}$).

In the third line print two strings separated by a space, **a'** and **b'**. **a'** and **b'** are the same as **a** and **b**, respectively, except that their first characters are swapped.

Sample Input

abcd

ef

Sample Output

42

abcdef

ebcd af

```
b = "ef"
|a| = 4
|b| = 2
a + b = "abcdef"
a' = "ebcd"
b' = "af"
Answer: (penalty regime: 0 %)
    1
    2
      #include<stdio.h>
   4 v int main(){
           char str1[10],str2[10],t;
    5
           int i=0,j=0;
           int c1=0,c2=0;
           scanf("%s",str1);
    8
           scanf("%s",str2);
    9
           while(str1[i]!='\0'){
   10 •
   11
               c1++;
               i++;
   12
   13
           while(str2[j]!='\0'){
   14 🔻
   15
               c2++;
               j++;
   16
   17
           printf("%d %d\n",c1,c2);
   18
           printf("%s%s\n",str1,str2);
   19
   20
           t=str1[0];
   21
           str1[0]=str2[0];
   22
           str2[0]=t;
   23
           printf("%s %s",str1,str2);
   24
           return 0;
   25
```

a = "abcd"



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