**Started on** Sunday, 31 December 2023, 9:06 AM

**State** Finished

**Completed on** Sunday, 31 December 2023, 9:50 AM

**Time taken** 44 mins 16 secs

Question **1** 

Correct

Marked out of 25.00

Given a string, 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**

## $1 \le len(num) \le 1000$

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

#### **Output Format**

Print ten space-separated integers in a single line denoting the frequency of each digit from 0 to 9.

## 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.

#### For example:

Input	Result		
a11472o5t6	0 2 1 0 1 1 1 1 0 0		
lw4n88j12n1	0210100020		
1v888861256338ar0ekk	1 1 1 2 0 1 2 0 5 0		

```
1 | import java.util.*;
 2 → public class Frequency{
3
        public static void main(String[] argd)
4 .
5
            Scanner sc = new Scanner(System.in);
            String s = sc.next();
6
            int[] a = new int[10];
7
8
            Arrays.fill(a,₀);
9
            for(char i:s.toCharArray())
10
11 🔻
            {
12
                 //System.out.print(i);
                if(i>='0' && i<='9')
13
14 v
15
                     a[i-48]=a[i-48]+1;
                 }
16
17
            for(int i=0;i<10;i++)</pre>
18
19 🔻
            {
20
                System.out.print(a[i]+" ");
21
22
        }
23 }
```

	Input	Expected	Got	
•	a11472o5t6	0 2 1 0 1 1 1 1 0 0	0 2 1 0 1 1 1 1 0 0	~

	Input	Expected	Got	
<b>~</b>	lw4n88j12n1	0210100020	0 2 1 0 1 0 0 0 2 0	~
~	1v888861256338ar0ekk	1112012050	1 1 1 2 0 1 2 0 5 0	~

Question 2

Correct

Marked out of 25.00

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.

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:

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

#### Constraints:

 $1 \le T \le 10$ 

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

## **SAMPLE INPUT**

2

nBBZLaosnm

JHklsnZtTL

#### **SAMPLE OUTPUT**

2

1

#### **Explanation**

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

#### For example:

Input	Result
2	2
nBBZLaosnm	1
JHkIsnZtTL	
2	2
nBBZLaosnm	1
JHkIsnZtTL	

```
1 → import java.util.*;
 2
    public class Vowels
 3 ₹
 4
        public static void main(String[] args)
 5 🔻
            Scanner sc = new Scanner(System.in);
 6
            int t = sc.nextInt();
 8
            for(int j=0;j<t;j++)</pre>
 9
             {
                 String s = sc.next();
10
11
                 int c=0;
                 for(char i : s.toCharArray())
12
13
                 {
                     if(i=='A' || i=='E' || i=='I' || i=='O' || i=='U' || i=='a' || i=='e' || i=='i' || i=='
14
15
                     {
16
                         C++;
17
18
19
                 System.out.println(c);
20
            }
21
        }
22
```

	Input	Expected	Got	
~	2 nBBZLaosnm JHkIsnZtTL	2	2	*
~	2 nBBZLaosnm JHkIsnZtTL	2	2	<b>~</b>

11

Question **3**Correct

Marked out of 25.00

#### **Input Format**

You are given two strings, a and 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

## **Explanation**

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

## For example:

Input	Result
abcd	4 2
ef	abcdef
	ebcd af

```
1 → import java.util.*;
 2
    public class StringOperations
3 ₹ {
4
        public static void main(String[] args)
5 ₹
            Scanner sc = new Scanner(System.in);
6
            String a = sc.next();
8
           String b = sc.next();
            System.out.println(a.length() + " " + b.length());
9
10
            System.out.println(a+b);
11
            System.out.println(b.charAt(0)+a.substring(1,a.length())+" "+a.charAt(0)+b.substring(1,b.length
12
       }
13 }
```

	Input	Expected	Got	
~	abcd ef	4 2 abcdef ebcd af	4 2 abcdef ebcd af	<b>~</b>

Question 4

Correct

Marked out of 25.00

Given a sentence, **s**, print each word of the sentence in a new line.

#### **Input Format**

The first and only line contains a sentence, s.

## Constraints

## $1 \le len(s) \le 1000$

## **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**

In the given string, there are three words ["This", "is", "C"]. We have to print each of these words in a new line.

# For example:

Input	Result
This is C	This is C
Learning C is fun	Learning C is fun

```
1 v import java.util.*;
 2 public class NewLine{
 3
        public static void main(String[] args)
 4 ₹
5
            Scanner sc = new Scanner(System.in);
 6
            String s = sc.nextLine();
 7
            for(char i:s.toCharArray())
 8 ,
 9
                if(i!=' ')
10 🔻
                {
                    System.out.print(i);
11
12
13
                else
14 🔻
15
                    System.out.println();
16
17
            }
        }
18
19 }
```

	Input	Expected	Got	
~	This is C	This is C	This is C	<b>~</b>
*	Learning C is fun	Learning C is fun	Learning C is fun	<b>*</b>