

Question **1**

Correct

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

$1 \leq \text{len}(\text{num}) \leq 1000$

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

0 2 1 0 1 1 1 1 0 0

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 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char s[1001];
6     int freq[10] = {0};      // Frequency array for digits 0-9
7
8     scanf("%s", s);         // Read the input string
9
10    // Traverse the string
11    for(int i = 0; s[i] != '\0'; i++) {
12        if(s[i] >= '0' && s[i] <= '9') { // Check if character is a digit
13            freq[s[i] - '0']++;           // Convert char digit to index
14        }
15    }
16
17    // Print frequencies of digits 0 to 9
18    for(int i = 0; i < 10; i++) {
19        printf("%d", freq[i]);
20        if(i < 9) printf(" ");
21    }
22
23    return 0;
24 }
```



	Input
✓	a11472o5t6
✓	lw4n88j12n1
✓	1v88886l256338ar0ekk
✓	8a36a4r26079184sr06u54rdr234u70653w7a32o181o8980780958s3u5y27m69gr4a14382f8g552l
✓	b3n47b5xf13qlx233rg4u2c949i623e34nt5661se06b675utbpy258wz6338558461761d61x340h1`



Passed all tests! ✓



Question 2

Correct

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

$1 \leq \text{len}(s) \leq 1000$

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

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

Answer: (penalty regime: 0 %)

```

1 #include <stdio.h>
2
3 int main() {
4     char s[1001];
5
6     // Read the full sentence including spaces
7     fgets(s, sizeof(s), stdin);
8
9     // Print each word on a new line
10    for (int i = 0; s[i] != '\0'; i++) {
11        if (s[i] == ' ') {
12            printf("\n"); // New line when space is found
13        } else {
14            printf("%c", s[i]);
15        }
16    }
17
18    return 0;
19 }
```

	Input	Expected	Got	
✓	This is C	This is C	This is C	✓
✓	Learning C is fun	Learning C is fun	Learning C is fun	✓
✓	How is that	How is that	How is that	✓
✓	The first and only line contains a sentence	The first and only line contains a sentence	The first and only line contains a sentence	✓

Passed all tests! ✓

Question 3

Correct

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 **a** and **b** respectively.

In the second line print the string produced by concatenating **a** and **b** (**a + 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

4 2

abcdef

ebcd af

Explanation

$a = "abcd"$

$b = "ef"$

$|a| = 4$

$|b| = 2$

a + b = "abcdef"

a' = "ebcd"

b' = "af"

Answer: (penalty regime: 0 %)

```
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char a[1000], b[1000];
6
7     // Read two strings
8     scanf("%s", a);
9     scanf("%s", b);
10
11    // Print lengths
12    printf("%lu %lu\n", strlen(a), strlen(b));
13
14    // Print concatenation
15    printf("%s%s\n", a, b);
16
17    // Swap first characters (only if both strings are non-empty)
18    char a_prime[1000], b_prime[1000];
19    strcpy(a_prime, a);
20    strcpy(b_prime, b);
21
22    if (strlen(a) > 0 && strlen(b) > 0) {
23        char temp = a_prime[0];
24        a_prime[0] = b_prime[0];
25        b_prime[0] = temp;
26    }
27
28    // Print swapped result
29    printf("%s %s\n", a_prime, b_prime);
30
31    return 0;
32 }
```

	Input	Expected	Got	
✓	abcd ef	4 2 abcdef ebcd af	4 2 abcdef ebcd af	✓

	Input	Expected	Got	
✓	abcd xy	4 2 abcdxy xbcd ay	4 2 abcdxy xbcd ay	✓

Passed all tests! ✓