

Counting Characters

Time Limit : 1 sec, Memory Limit : 131072 KB

Counting Characters

Write a program which counts and reports the number of each alphabetical letter. Ignore the case of characters.

Input

Multiple strings are given. Input may be given in multiple lines.

Output

Output the number of each alphabet in the given input in the format shown below

```
a : The number of 'a'
b : The number of 'b'
c : The number of 'c'
.
.
z : The number of 'z'
```

Constraints

- The number of characters in the sentence < 1200
- A string consists of lowercase and uppercase letters, numbers, and symbols

Sample Input 1

```
This is a pen.
```

Sample Output 1

```
a : 1
b : 0
c : 0
d : 0
e : 1
f : 0
g : 0
h : 1
i : 2
j : 0
k : 0
l : 0
m : 0
n : 1
o : 0
p : 1
q : 0
r : 0
s : 2
t : 1
u : 0
v : 0
w : 0
x : 0
y : 0
z : 0
```

Sample Input 2

```
ABCD E F Z
x
y
z
```

Sample Output 2

```
a : 1
b : 1
c : 1
d : 1
e : 1
f : 1
g : 0
h : 0
i : 0
j : 0
k : 0
l : 0
m : 0
n : 0
o : 0
p : 0
q : 0
r : 0
s : 0
t : 0
u : 0
v : 0
w : 0
x : 1
y : 1
z : 2
```

Source: https://onlinejudge.u-aizu.ac.jp/problems/ITP1_8_C