Most Common

You are given a string S.
The string contains only lowercase English alphabet characters.

Your task is to find the top three most common characters in the string S.

Input Format

A single line of input containing the string S.

Constraints

$3 < len(S) < 10^4$

Output Format

Print the three most common characters along with their occurrence count each on a separate line.
Sort output in descending order of occurrence count.
If the occurrence count is the same, sort the characters in ascending order.

Sample Input

```
aabbbccde
```

Sample Output

```
b 3
a 2
c 2
```

Explanation

Here, *b* occurs 3 times. It is printed first.
Both *a* and *c* occur 2 times. So, *a* is printed in the second line and *c* in the third line because *a* comes before *c*.

Note: The string S has at least 3 distinct characters.