

# 1189. Maximum Number of Balloons

Hint



Easy



1.6K

88



Companies

Given a string `text`, you want to use the characters of `text` to form as many instances of the word "balloon" as possible.

You can use each character in `text` **at most once**. Return the maximum number of instances that can be formed.

Example 1:

nlaebolko

Input: `text = "nlaebolko"`

Output: 1

Example 2:

loonbalxballpoon

Input: `text = "loonbalxballpoon"`

Output: 2

Example 3:

Input: `text = "leetcode"`

Output: 0

Constraints:

- $1 \leq \text{text.length} \leq 10^4$
- `text` consists of lower case English letters only.

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b a l l o o n

we need even no. of occurrences of  
l and o to form any x no. of balloons.  
ie. if x l's are there  
Then we can create  $x/2$  balloons

The most simple and concise code is

unordered set S

```
for(auto i : text)
    m[i]++

return min(m['a'], min(m['b'], min(
    m['n'], min(m['l']/2, m['o']/2))))
```

$T(n) = O(n)$   
 $S(n) = O(n)$

note: if a key is not there in map  
and we access it using `[]` then  
it will create that key and assign  
default value 0.

So

if any of the character of balloon is  
not at all there in input string text then  
`m[]` will give 0 and hence overall min  
becomes 0 & 0 is returned.

