

6375. Minimum Additions to Make Valid String

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Given a string `word` to which you can insert letters "a", "b" or "c" anywhere and any number of times, return *the minimum number of letters that must be inserted so that `word` becomes **valid***.

A string is called **valid** if it can be formed by concatenating the string "abc" several times.

Example 1:

Input: word = "b"

Output: 2

Explanation: Insert the letter "a" right before "b", and the letter "c" right next to "a" to obt

Example 2:

Input: word = "aaa"

Output: 6

Explanation: Insert letters "b" and "c" next to each "a" to obtain the valid string "abcabcabc".

Example 3:

Input: word = "abc"

Output: 0

Explanation: word is already valid. No modifications are needed.

Constraints:

- 1 <= word.length <= 50
- word consists of letters "a", "b" and "c" only.

JavaScript

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```
1 const next = (c) => {
2   if (c == 'a') {
3     return 'b';
4   } else if (c == 'b') {
5     return 'c';
6   } else {
7     return 'a';
8   }
9 };
10 const cutMaxConsecutive = (as) => { let d = [], l = 0, n = as.length; for (let i = 0; i + 1 < n; i++) { if (as[i + 1] != as[i]) { d.push(as.slice(l, i + 1)); l = i + 1; } } d.push(as.slice(l)); return d; };
11
12 const addMinimum = (s) => {
13   let n = s.length, res = '', d = cutMaxConsecutive(s), cnt = 0, con = 0;
14   for (let i = 0; i < d.length; i++) {
15     if (d[i][0] == 'a' && i + 1 < d.length && d[i + 1][0] == 'b') con++;
16     if (d[i][0] == 'a' && i + 1 < d.length && d[i + 1][0] == 'c') con++;
17     if (d[i][0] == 'b' && i + 1 < d.length && d[i + 1][0] == 'c') con++;
18     cnt += d[i].length;
19   }
20   res = 'abc'.repeat(cnt - con);
21   return res.length - n;
22 };
```


☐ Custom Testcase

Use Example Testcases

 Run

 Submit

Submission Result: **Accepted** (/submissions/detail/934510632/) 

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