2020/9/11 E - ABC String

> Contest Duration: 2019-07-21(Sun) 20:00 (http://www.timeanddate.com/worldclock/fixedtime.html?  $iso = 20190721T2100\&p1 = 248) \sim 2019-07-21(Sun) 22:40 (http://www.timeanddate.com/worldclock/fixedtime.html?$ iso=20190721T2340&p1=248) (local time) (160 minutes) Back to Home (/home)

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# E - ABC String Editorial (/contests/agc036/tasks/agc036\_e/editorial)

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Time Limit: 2 sec / Memory Limit: 1024 MB

Score: 1500 points

#### **Problem Statement**

Given is a string S consisting of 'A', 'B', and 'C'.

Consider the (not necessarily contiguous) subsequences x of S that satisfy all of the following conditions:

- 'A', 'B', and 'C' all occur the same number of times in x.
- No two adjacent characters in x are the same.

Among these subsequences, find one of the longest. Here a subsequence of S is a string obtained by deleting zero or more characters from S.

#### **Constraints**

- $1 \le |S| \le 10^6$
- S consists of 'A', 'B', and 'C'.

## Input

Input is given from Standard Input in the following format:

2020-09-11 (Fri) 08:45:24 +08:00 S

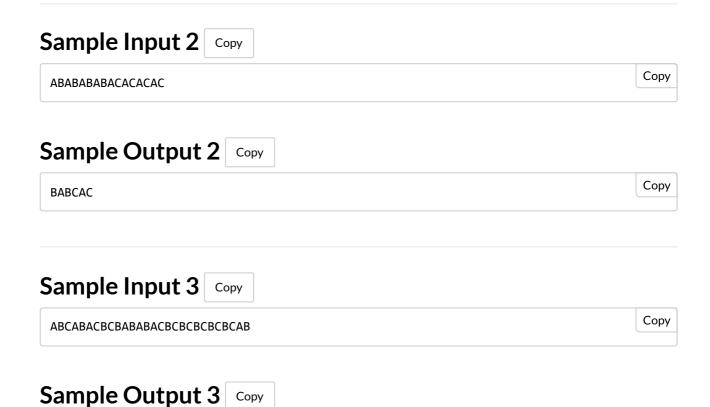
## **Output**

**ACBCAB** 

Print one longest subsequence that satisfies the conditions. If multiple solutions exist, any of them will be accepted.

# Sample Input 1 Copy Copy **ABBCBCAB** Sample Output 1 Copy Copy

Consider the subsequence 'ACBCAB' of S. It satisfies the conditions and is one of the longest with these properties, along with 'ABCBCA'. On the other hand, the subsequences 'ABCBCAB' and 'ABBCCA' do not satisfy the conditions.

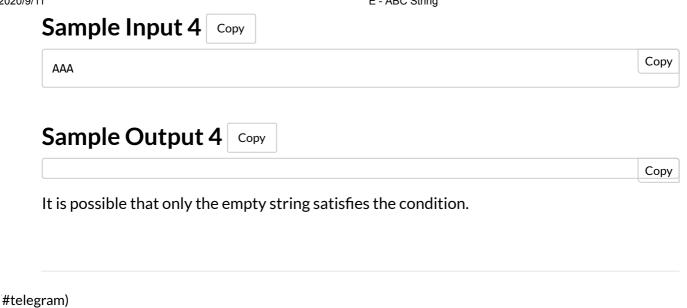


Сору

ACABACABABACBCBCBCBCA

Copy

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