2020/9/11 E - ABBreviate

> Contest Duration: 2018-09-15(Sat) 20:00 (http://www.timeanddate.com/worldclock/fixedtime.html?  $iso=20180915T2100\&p1=248) \sim 2018-09-15(Sat) \ 22:20 \ (http://www.timeanddate.com/worldclock/fixedtime.html?) \ (http://www.timean$ iso=20180915T2320&p1=248) (local time) (140 minutes) Back to Home (/home)

↑ Top (/contests/agc027) Tasks (/contests/agc027/tasks)

**?** Clarifications (/contests/agc027/clarifications) **≣** Results **▼** 

↓ Standings (/contests/agc027/standings)

↓ Virtual Standings (/contests/agc027/standings/virtual)

Editorial (/contests/agc027/editorial)

×

# E - ABBreviate | Editorial (/contests/agc027/tasks/agc027\_e/editorial)

• / 🚟

Time Limit: 2 sec / Memory Limit: 1024 MB

Score: 1300 points

#### **Problem Statement**

There is a string s consisting of 'a' and 'b'. Snuke can perform the following two kinds of operation any number of times in any order:

- Choose an occurrence of 'aa' as a substring, and replace it with 'b'.
- Choose an occurrence of 'bb' as a substring, and replace it with 'a'.

How many strings s can be obtained by this sequence of operations? Find the count modulo  $10^9 + 7$ .

## **Constraints**

- $1 \le |s| \le 10^5$
- s consists of 'a' and 'b'.

### Input

Input is given from Standard Input in the following format:

s2020-09-11 (Fri) 08:43:29 +08:00 2020/9/11 E - ABBreviate

# **Output**

Print the number of strings s that can be obtained, modulo  $10^9 + 7$ .

Sample Input 1 Copy	
aaaa	Сору
Sample Output 1 Copy	
6	Сору
Six strings can be obtained:	
• 'aaaa'	
• 'aab'	
• 'aba'	
• 'baa'	
• 'bb'	
• 'a'	
Companie Impant O	
Sample Input 2 Copy	-
aabb	Сору
Sample Output 2 Com	
Sample Output 2 Copy	
5	Сору
Five strings can be obtained:	
• 'aabb'	
• 'aaa'	
• 'bbb'	
• 'ah'	

Sample Input 3 Copy

2020/9/11 E - ABBreviate

Sample Output 3 Copy

1
Snuke cannot perform any operation.

Sample Input 4 Copy

babbabaaba

Sample Output 4 Copy

#telegram)

35

url=https%3A%2F%2Fatcoder.jp%2Fcontests%2Fagc027%2Ftasks%2Fagc027\_e%3Flang%3Den&title=E%20-

Rule (/contests/agc027/rules) Glossary (/contests/agc027/glossary)

Terms of service (/tos) Privacy Policy (/privacy) Information Protection Policy (/personal) Company (/company)

FAQ (/faq) Contact (/contact)

Copyright Since 2012 ©AtCoder Inc. (http://atcoder.co.jp) All rights reserved.

2020-09-11 (Fri) 08:43:29 +08:00

Copy

Copy

Copy