I. Minimum number of steps

Time limit: 1s Memory limit: 256 MB

We have a string of letters 'a' and 'b'. We want to perform some operations on it. On each step we choose one of substrings "ab" in the string and replace it with the string "bba". If we have no "ab" as a substring, our job is done. Print the minimum number of steps we should perform to make our job done modulo $10^9 + 7$.

The string "ab" appears as a substring if there is a letter 'b' right after the letter 'a' somewhere in the string.

Input

The first line contains the initial string consisting of letters 'a' and 'b' only with length from 1 to 10^6.

Output

Print the minimum number of steps modulo $10^9 + 7$.

Examples

input
ab
output
1

input
aab
output
3

Note

The first example: "ab" → "bba".

The second example: "aab" → "abba" → "bbaba" → "bbbbaa".