Given a string s consisting only of letters 'a' and 'b'. In a single step you can remove one palindromic **subsequence** from s.

Return the minimum number of steps to make the given string empty.

A string is a subsequence of a given string, if it is generated by deleting some characters of a given string without changing its order.

A string is called palindrome if is one that reads the same backward as well as forward.

**Example 1:**

**Input:** s = "ababa"

**Output:** 1

**Explanation:** String is already palindrome

**Example 2:**

**Input:** s = "abb"

**Output:** 2

**Explanation:** "**a**bb" -> "**bb**" -> "".

Remove palindromic subsequence "a" then "bb".

**Example 3:**

**Input:** s = "baabb"

**Output:** 2

**Explanation:** "**baa**b**b**" -> "b" -> "".

Remove palindromic subsequence "baab" then "b".

**Example 4:**

**Input:** s = ""

**Output:** 0

**Constraints:**

* 0 <= s.length <= 1000
* s only consists of letters 'a' and 'b'