

Minimum Deletions to Make String Balanced

You are given a string s consisting only of characters 'a' and 'b'.

You can delete any number of characters in s to make s **balanced**. s is **balanced** if there is no pair of indices (i, j) such that $i < j$ and $s[i] = 'b'$ and $s[j] = 'a'$.

Return the *minimum* number of deletions needed to make s **balanced**.

Example 1:

Input: $s = \text{"aababbab"}$

Output: 2

Explanation: You can either:

Delete the characters at 0-indexed positions 2 and 6 ("a**a**babb**a**b" -> "aaabbbb"), or

Delete the characters at 0-indexed positions 3 and 6 ("aab**a**bbab" -> "aabbbb").

Example 2:

Input: $s = \text{"bbaaaaabb"}$

Output: 2

Explanation: The only solution is to delete the first two characters.

Constraints:

- $1 \leq s.length \leq 10^5$
- $s[i]$ is 'a' or 'b'.