

Problem 1653: Minimum Deletions to Make String Balanced

Problem Information

Difficulty: Medium

Acceptance Rate: 65.60%

Paid Only: No

Tags: String, Dynamic Programming, Stack

Problem Description

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 = "aababbab" **Output:** 2 **Explanation:** You can either: Delete the characters at 0-indexed positions 2 and 6 ("aa _b_ abb _a_ b" -> "aaabbb"), or Delete the characters at 0-indexed positions 3 and 6 ("aab _a_ bb _a_ b" -> "aabb").

Example 2:

Input: s = "bbaaaaabb" **Output:** 2 **Explanation:** The only solution is to delete the first two characters.

Constraints:

* `1 <= s.length <= 105` * `s[i]` is ``a`` or ``b``.

Code Snippets

C++:

```
class Solution {  
public:  
int minimumDeletions(string s) {  
  
}  
};
```

Java:

```
class Solution {  
public int minimumDeletions(String s) {  
  
}  
}
```

Python3:

```
class Solution:  
def minimumDeletions(self, s: str) -> int:
```