

# 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`" -> "`aabbbb`").

**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:
```