

# Problem 3412: Find Mirror Score of a String

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 34.82%

**Paid Only:** No

**Tags:** Hash Table, String, Stack, Simulation

## Problem Description

You are given a string `s`.

We define the **mirror** of a letter in the English alphabet as its corresponding letter when the alphabet is reversed. For example, the mirror of `'a'` is `'z'`, and the mirror of `'y'` is `'b'`.

Initially, all characters in the string `s` are **unmarked**.

You start with a score of 0, and you perform the following process on the string `s`:

\* Iterate through the string from left to right. \* At each index `i`, find the closest **unmarked** index `j` such that `j < i` and `s[j]` is the mirror of `s[i]`. Then, **mark** both indices `i` and `j`, and add the value `i - j` to the total score. \* If no such index `j` exists for the index `i`, move on to the next index without making any changes.

Return the total score at the end of the process.

**Example 1:**

**Input:** `s = "aczzx"`

**Output:** 5

**Explanation:**

\* `i = 0`. There is no index `j` that satisfies the conditions, so we skip. \* `i = 1`. There is no index `j` that satisfies the conditions, so we skip. \* `i = 2`. The closest index `j` that satisfies

the conditions is  $j = 0$ , so we mark both indices 0 and 2, and then add  $2 - 0 = 2$  to the score.  $i = 3$ . There is no index  $j$  that satisfies the conditions, so we skip.  $i = 4$ . The closest index  $j$  that satisfies the conditions is  $j = 1$ , so we mark both indices 1 and 4, and then add  $4 - 1 = 3$  to the score.

**Example 2:**

**Input:** `s = "abcdef"`

**Output:** 0

**Explanation:**

For each index  $i$ , there is no index  $j$  that satisfies the conditions.

**Constraints:**

$1 \leq s.length \leq 105$   $s$  consists only of lowercase English letters.

## Code Snippets

**C++:**

```
class Solution {
public:
    long long calculateScore(string s) {

    }
};
```

**Java:**

```
class Solution {
    public long calculateScore(String s) {

    }
}
```

**Python3:**

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