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Description

Solution

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Submissions

1578. Minimum Time to Make Rope Colorful

Medium 2563 72 Add to List Share

Alice has n balloons arranged on a rope. You are given a **0-indexed** string `colors` where `colors[i]` is the color of the i^{th} balloon.

Alice wants the rope to be **colorful**. She does not want **two consecutive balloons** to be of the same color, so she asks Bob for help. Bob can remove some balloons from the rope to make it **colorful**. You are given a **0-indexed** integer array `neededTime` where `neededTime[i]` is the time (in seconds) that Bob needs to remove the i^{th} balloon from the rope.

Return the **minimum time** Bob needs to make the rope **colorful**.

Example 1:

Input: `colors = "abaac"`, `neededTime = [1,2,3,4,5]`
Output: 3
Explanation: In the above image, 'a' is blue, 'b' is red, and 'c' is green. Bob can remove the blue balloon at index 2. This takes 3 seconds. There are no longer two consecutive balloons of the same color. Total time = 3.

Example 2:

Input: `colors = "abc"`, `neededTime = [1,2,3]`
Output: 0
Explanation: The rope is already colorful. Bob does not need to remove any balloons from the rope.

Example 3:

Input: `colors = "aabaa"`, `neededTime = [1,2,3,4,1]`
Output: 2
Explanation: Bob will remove the balloons at indices 0 and 4. Each balloon takes 1 second to remove. There are no longer two consecutive balloons of the same color. Total time = 1 + 1 = 2.

Constraints:

- $n == \text{colors.length} == \text{neededTime.length}$
- $1 \leq n \leq 10^5$
- $1 \leq \text{neededTime}[i] \leq 10^4$
- `colors` contains only lowercase English letters.

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```
class Solution {
    public int minCost(String colors, int[] neededTime) {
    }
}
```

Console

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1578/2431

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Run Code ^

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https://leetcode.com/problems/minimum-time-to-make-rope-colorful/

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