

Problem 3135: Equalize Strings by Adding or Removing Characters at Ends

Problem Information

Difficulty: Medium

Acceptance Rate: 55.82%

Paid Only: Yes

Tags: String, Binary Search, Dynamic Programming, Sliding Window, Hash Function

Problem Description

Given two strings `initial` and `target`, your task is to modify `initial` by performing a series of operations to make it equal to `target`.

In one operation, you can add or remove **one character** only at the _beginning_ or the _end_ of the string `initial`.

Return the **minimum** number of operations required to _transform_ `initial` into `target`.

Example 1:

Input: initial = "abcde", target = "cdef"

Output: 3

Explanation:

Remove 'a' and 'b' from the beginning of `initial`, then add 'f' to the end.

Example 2:

Input: initial = "axxy", target = "yabx"

Output: 6

****Explanation:****

Operation | Resulting String ---|--- Add `y` to the beginning | `yaxxy` Remove from end | `yaxx` Remove from end | `yax` Remove from end | `ya` Add `b` to the end | `yab` Add `x` to the end | `yabx`
****Example 3:****

****Input:**** initial = "xyz", target = "xyz"

****Output:**** 0

****Explanation:****

No operations are needed as the strings are already equal.

****Constraints:****

* `1 <= initial.length, target.length <= 1000` * `initial` and `target` consist only of lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
    int minOperations(string initial, string target) {
        }
    };
}
```

Java:

```
class Solution {
public int minOperations(String initial, String target) {
        }
    }
}
```

Python3:

```
class Solution:  
    def minOperations(self, initial: str, target: str) -> int:
```