1737. Change Minimum Characters to Satisfy One of Three Conditions

Description

You are given two strings `a` and `b` that consist of lowercase letters. In one operation, you can change any character in `a` or `b` to **any lowercase letter**.

Your goal is to satisfy **one** of the following three conditions:

- **Every** letter in `a` is **strictly less** than **every** letter in `b` in the alphabet.
- **Every** letter in `b` is **strictly less** than **every** letter in `a` in the alphabet.
- **Both** `a` and `b` consist of **only one** distinct letter.

Return *the **minimum** number of operations needed to achieve your goal.*

Example 1:

```
Input: a = "aba", b = "caa"
Output: 2
Explanation: Consider the best way to make each condition true:
1) Change b to "ccc" in 2 operations, then every letter in a is less than every letter in b.
2) Change a to "bbb" and b to "aaa" in 3 operations, then every letter in b is less than every letter in a.
3) Change a to "aaa" and b to "aaa" in 2 operations, then a and b consist of one distinct letter.
The best way was done in 2 operations (either condition 1 or condition 3).
```

Example 2:

```
Input: a = "dabadd", b = "cda"
Output: 3
Explanation: The best way is to make condition 1 true by changing b to "eee".
```

Constraints:

- `1 <= a.length, b.length <= 10^5`
- `a` and `b` consist only of lowercase letters.