3561. Resulting String After Adjacent Removals

Solved

Medium Hint

You are given a string `s` consisting of lowercase English letters.

You **must** repeatedly perform the following operation while the string `s` has **at least** two **consecutive** characters:

- Remove the **leftmost** pair of **adjacent** characters in the string that are **consecutive** in the alphabet, in either order (e.g., `'a'` and `'b'`, or `'b'` and `'a'`).
- Shift the remaining characters to the left to fill the gap.

Return the resulting string after no more operations can be performed.

Note: Consider the alphabet as circular, thus `'a'` and `'z'` are consecutive.

Example 1:

> **Input:** s = "abc"
>
> **Output:** "c"
>
> **Explanation:**
>
> - Remove `"ab"` from the string, leaving `"c"` as the remaining string.
> - No further operations are possible. Thus, the resulting string after all possible removals is `"c"`.

Example 2:

> **Input:** s = "adcb"
>
> **Output:** ""
>
> **Explanation:**
>
> - Remove `"dc"` from the string, leaving `"ab"` as the remaining string.
> - Remove `"ab"` from the string, leaving `""` as the remaining string.
> - No further operations are possible. Thus, the resulting string after all possible removals is `""`.

Example 3:

> **Input:** s = "zadb"
>
> **Output:** "db"
>
> **Explanation:**
>
> - Remove `"za"` from the string, leaving `"db"` as the remaining string.
> - No further operations are possible. Thus, the resulting string after all possible removals is `"db"`.

Constraints:

- `1 <= s.length <= 10^5`
- `s` consists only of lowercase English letters.

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Discussion (14)