

1202. Smallest String With Swaps

Description

You are given a string `s`, and an array of pairs of indices in the string `pairs` where `pairs[i] = [a, b]` indicates 2 indices(0-indexed) of the string.

You can swap the characters at any pair of indices in the given `pairs` **any number of times**.

Return the lexicographically smallest string that `s` can be changed to after using the swaps.

Example 1:

Input: `s = "dcab", pairs = [[0,3],[1,2]]`

Output: `"bacd"`

Explanation:

Swap `s[0]` and `s[3]`, `s = "bcad"`

Swap `s[1]` and `s[2]`, `s = "bacd"`

Example 2:

Input: `s = "dcab", pairs = [[0,3],[1,2],[0,2]]`

Output: `"abcd"`

Explanation:

Swap `s[0]` and `s[3]`, `s = "bcad"`

Swap `s[0]` and `s[2]`, `s = "acbd"`

Swap `s[1]` and `s[2]`, `s = "abcd"`

Example 3:

Input: `s = "cba", pairs = [[0,1],[1,2]]`

Output: `"abc"`

Explanation:

Swap `s[0]` and `s[1]`, `s = "bca"`

Swap `s[1]` and `s[2]`, `s = "bac"`

Swap `s[0]` and `s[1]`, `s = "abc"`

Constraints:

- `1 <= s.length <= 10^5`
- `0 <= pairs.length <= 10^5`
- `0 <= pairs[i][0], pairs[i][1] < s.length`
- `s` only contains lower case English letters.

