

955. Delete Columns to Make Sorted II

Description

You are given an array of `n` strings `strs`, all of the same length.

We may choose any deletion indices, and we delete all the characters in those indices for each string.

For example, if we have `strs = ["abcdef", "uvwxyz"]` and deletion indices `{0, 2, 3}`, then the final array after deletions is `["bef", "vyz"]`.

Suppose we chose a set of deletion indices `answer` such that after deletions, the final array has its elements in **lexicographic** order (i.e., `strs[0] <= strs[1] <= strs[2] <= ... <= strs[n - 1]`). Return *the minimum possible value of* `answer.length`.

Example 1:

Input: `strs = ["ca","bb","ac"]`
Output: `1`
Explanation:
After deleting the first column, `strs = ["a", "b", "c"]`.
Now `strs` is in lexicographic order (ie. `strs[0] <= strs[1] <= strs[2]`).
We require at least 1 deletion since initially `strs` was not in lexicographic order, so the answer is 1.

Example 2:

Input: `strs = ["xc","yb","za"]`
Output: `0`
Explanation:
`strs` is already in lexicographic order, so we do not need to delete anything.
Note that the rows of `strs` are not necessarily in lexicographic order:
i.e., it is NOT necessarily true that (`strs[0][0] <= strs[0][1] <= ...`)

Example 3:

Input: `strs = ["zyx","wvu","tsr"]`
Output: `3`
Explanation: We have to delete every column.

Constraints:

- `n == strs.length`
- `1 <= n <= 100`
- `1 <= strs[i].length <= 100`
- `strs[i]` consists of lowercase English letters.

