Problem 944: Delete Columns to Make Sorted

Problem Information

Difficulty: Easy
Acceptance Rate: 74.94%
Paid Only: No
Tags: Array, String

Problem Description

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

The strings can be arranged such that there is one on each line, making a grid.

* For example, `strs = ["abc", "bce", "cae"]` can be arranged as follows:

abc bce cae

You want to **delete** the columns that are **not sorted lexicographically**. In the above example (**0-indexed**), columns 0 (`'a'`, `'b'`, `'c'`) and 2 (`'c'`, `'e'`, `'e'`) are sorted, while column 1 (`'b'`, `'c'`, `'a'`) is not, so you would delete column 1.

Return _the number of columns that you will delete_.

Example 1:

Input: strs = ["cba","daf","ghi"] **Output:** 1 **Explanation:** The grid looks as follows: cba daf ghi Columns 0 and 2 are sorted, but column 1 is not, so you only need to delete 1 column.

Example 2:

Input: strs = ["a","b"] **Output:** 0 **Explanation:** The grid looks as follows: a b Column 0 is the only column and is sorted, so you will not delete any columns.

Example 3:

Input: strs = ["zyx","wvu","tsr"] **Output:** 3 **Explanation:** The grid looks as follows: zyx wvu tsr All 3 columns are not sorted, so you will delete all 3.

Constraints:

* `n == strs.length` * `1 <= n <= 100` * `1 <= strs[i].length <= 1000` * `strs[i]` consists of lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
int minDeletionSize(vector<string>& strs) {

}
};
```

Java:

```
class Solution {
public int minDeletionSize(String[] strs) {

}
}
```

Python3:

```
class Solution:
def minDeletionSize(self, strs: List[str]) -> int:
```