Description | Editorial | Solutions | Submissions

1427. Perform String Shifts

Premium

Solved

Easy | Topics | Companies | Hint

You are given a string `s` containing lowercase English letters, and a matrix `shift`, where `shift[i] = [direction_i, amount_i]`:

- `direction_i` can be `0` (for left shift) or `1` (for right shift).
- `amount_i` is the amount by which string `s` is to be shifted.
- A left shift by 1 means remove the first character of `s` and append it to the end.
- Similarly, a right shift by 1 means remove the last character of `s` and add it to the beginning.

Return the final string after all operations.

Example 1:

```
Input: s = "abc", shift = [[0,1],[1,2]]
Output: "cab"
Explanation:
[0,1] means shift to left by 1. "abc" -> "bca"
[1,2] means shift to right by 2. "bca" -> "cab"
```

Example 2:

```
Input: s = "abcdefg", shift = [[1,1],[1,1],[0,2],[1,3]]
Output: "efgabcd"
Explanation:
[1,1] means shift to right by 1. "abcdefg" -> "gabcdef"
[1,1] means shift to right by 1. "gabcdef" -> "fgabcde"
[0,2] means shift to left by 2. "fgabcde" -> "abcdefg"
[1,3] means shift to right by 3. "abcdefg" -> "efgabcd"
```

Constraints:

- `1 <= s.length <= 100`
- `s` only contains lower case English letters.
- `1 <= shift.length <= 100`
- `shift[i].length == 2`
- `direction_i` is either `0` or `1`.
- `0 <= amount_i <= 100`

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

Yes | No

Accepted 79.9K | Submissions 146.1K | Acceptance Rate 54.7%

Topics

Companies

Hint 1

Hint 2

Discussion (4)

241 | 4

Code

Python3 • Auto

```python
class Solution:
    def stringShift(self, s: str, shift: List[List[int]]) -> str:

        s = list(s)

        length = len(s)

        for each in shift:
            each[1] = each[1] % length
            if each[0] == 0:
                s = s[each[1]:] + s[:each[1]]

            else:
                s = s[-each[1]:] + s[:-each[1]]

        return "".join(s)

```

Saved

Ln 13, Col 18

Testcase | Test Result

Accepted Runtime: 52 ms

• Case 1 • Case 2

Input

s =
"abcdefg"

shift =
[[1,1],[1,1],[0,2],[1,3]]

Output

"efgabcd"

Expected