Problem 1427: Perform String Shifts

Problem Information

Difficulty: Easy
Acceptance Rate: 55.92%
Paid Only: Yes
Tags: Array, Math, String

Problem Description

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

* `directioni` can be `0` (for left shift) or `1` (for right shift). * `amounti` 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` * `directioni` is either `0` or `1`. * `0 <= amounti <= 100`

Code Snippets

C++:

```
class Solution {
public:
string stringShift(string s, vector<vector<int>>& shift) {

}
};
```

Java:

```
class Solution {
public String stringShift(String s, int[][] shift) {

}
}
```

Python3:

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