

484. Find Permutation

Description

A permutation `perm` of `n` integers of all the integers in the range `[1, n]` can be represented as a string `s` of length `n - 1` where:

- `s[i] == 'I'` if `perm[i] < perm[i + 1]`, and
- `s[i] == 'D'` if `perm[i] > perm[i + 1]`.

Given a string `s`, reconstruct the lexicographically smallest permutation `perm` and return it.

Example 1:

Input: `s = "I"`

Output: `[1,2]`

Explanation: `[1,2]` is the only legal permutation that can be represented by `s`, where the number 1 and 2 construct an increasing relationship.

Example 2:

Input: `s = "DI"`

Output: `[2,1,3]`

Explanation: Both `[2,1,3]` and `[3,1,2]` can be represented as `"DI"`, but since we want to find the smallest lexicographical permutation, you should return `[2,1,3]`

Constraints:

- `1 <= s.length <= 105`
- `s[i]` is either `'I'` or `'D'`.

