

## DI String Match

Easy

Given a string `S` that **only** contains "I" (increase) or "D" (decrease), let `N = S.length`.

Return **any** permutation `A` of `[0, 1, ..., N]` such that for all `i = 0, ..., N-1`:

- If `S[i] == "I"`, then `A[i] < A[i+1]`
- If `S[i] == "D"`, then `A[i] > A[i+1]`

### Example 1:

Input: "IDID"

Output: [0,4,1,3,2]

### Example 2:

Input: "III"

Output: [0,1,2,3]

### Example 3:

Input: "DDI"

Output: [3,2,0,1]

### Note:

1. `1 <= S.length <= 10000`
2. `S` only contains characters "I" or "D".