

## Backspace String Compare

Easy

Given two strings `S` and `T`, return if they are equal when both are typed into empty text editors. `#` means a backspace character.

### Example 1:

Input: `S = "ab#c"`, `T = "ad#c"`

Output: `true`

Explanation: Both `S` and `T` become `"ac"`.

### Example 2:

Input: `S = "ab##"`, `T = "c#d#"`

Output: `true`

Explanation: Both `S` and `T` become `""`.

### Example 3:

Input: `S = "a##c"`, `T = "#a#c"`

Output: `true`

Explanation: Both `S` and `T` become `"c"`.

### Example 4:

Input: `S = "a#c"`, `T = "b"`

Output: `false`

Explanation: `S` becomes `"c"` while `T` becomes `"b"`.

### Note:

1. `1 <= S.length <= 200`
2. `1 <= T.length <= 200`
3. `S` and `T` only contain lowercase letters and `'#'` characters.

### Follow up:

- Can you solve it in  $O(N)$  time?