

Given two strings *s* and *t*, return true *if they are equal when both are typed into empty text editors*. '#' means a backspace character.

Note that after backspacing an empty text, the text will continue empty.

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* = "b"

Output: false

Explanation: *s* becomes "c" while *t* becomes "b".

Constraints:

- $1 \leq s.length, t.length \leq 200$
- *s* and *t* only contain lowercase letters and '#' characters.

Follow up: Can you solve it in $O(n)$ time and $O(1)$ space?

Solution:

```
class Solution {
    public boolean backspaceCompare(String s, String t) {
        StringBuilder str1 = new StringBuilder();
        StringBuilder str2 = new StringBuilder();

        for (int i = 0; i < s.length(); i++) {
            if (s.charAt(i) == '#') {
                if (str1.length() > 0) {
                    str1.deleteCharAt(str1.length() - 1);
                }
            } else {
                str1.append(s.charAt(i));
            }
        }

        for (int i = 0; i < t.length(); i++) {
            if (t.charAt(i) == '#') {
                if (str2.length() > 0) {
                    str2.deleteCharAt(str2.length() - 1);
                }
            } else {
                str2.append(t.charAt(i));
            }
        }

        return str1.toString().equals(str2.toString());
    }
}
```