

844. Backspace String Compare

Solved ✓

Easy Topics Companies

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"`.

The screenshot displays a code editor interface. On the left, the problem description for '844. Backspace String Compare' is visible, along with a submission result for user 'ZhukovIlya' submitted on Jun 29, 2024, at 15:46. The submission is marked as 'Accepted' with a runtime of 46 ms (beating 92.38% of submissions) and a memory usage of 39.58 MB (beating 65.10%). A bar chart shows the distribution of runtimes for other submissions. The right pane shows the C# code for the solution, which uses two pointers, `i` and `j`, to traverse the strings `s` and `t` from the end towards the beginning, skipping backspace characters. The code is as follows:

```
public class Solution {
    public bool BackspaceCompare(string s, string t) {
        int i = s.Length - 1, j = t.Length - 1;
        int skipS = 0, skipT = 0;

        while (i >= 0 || j >= 0) {
            // Обращаемся к строке s
            while (i >= 0) {
                if (s[i] == '#') {
                    skipS++;
                    i--;
                } else if (skipS > 0) {
                    skipS--;
                    i--;
                } else {
                    break;
                }
            }
            // Обращаемся к строке t
            while (j >= 0) {
                if (t[j] == '#') {
                    skipT++;
                    j--;
                } else if (skipT > 0) {
                    skipT--;
                    j--;
                } else {
                    break;
                }
            }

            if (i >= 0 & j >= 0 & s[i] != t[j]) return false;
            i--; j--;
        }

        return true;
    }
}
```

Код:

```
public class Solution
{
    public bool BackspaceCompare(string s, string t)
    {
        int i = s.Length - 1, j = t.Length - 1;
        int skipS = 0, skipT = 0;
```

```

while (i >= 0 || j >= 0)
{
    // Обрабатываем строку s
    while (i >= 0)
    {
        if (s[i] == '#')
        {
            skipS++;
            i--;
        }
        else if (skipS > 0)
        {
            skipS--;
            i--;
        }
        else
        {
            break;
        }
    }

    // Обрабатываем строку t
    while (j >= 0)
    {
        if (t[j] == '#')
        {
            skipT++;
            j--;
        }
        else if (skipT > 0)
        {
            skipT--;
            j--;
        }
        else
        {
            break;
        }
    }

    // Сравниваем текущие символы
    if (i >= 0 && j >= 0 && s[i] != t[j])
    {
        return false;
    }

    // Проверяем, не осталось ли символов для сравнения
    if ((i >= 0) != (j >= 0))
    {
        return false;
    }

    i--;
    j--;
}

return true;
}
}

```