

Problem 392: Is Subsequence

Problem Information

Difficulty: Easy

Acceptance Rate: 48.68%

Paid Only: No

Tags: Two Pointers, String, Dynamic Programming

Problem Description

Given two strings `s` and `t`, return `true` if `s` is a **subsequence** of `t`, or `false` otherwise.

A **subsequence** of a string is a new string that is formed from the original string by deleting some (can be none) of the characters without disturbing the relative positions of the remaining characters. (i.e., `"ace"` is a subsequence of `"abcde"` while `"aec"` is not).

Example 1:

Input: `s = "abc", t = "ahbgdc"` **Output:** `true`

Example 2:

Input: `s = "axc", t = "ahbgdc"` **Output:** `false`

Constraints:

`0 <= s.length <= 100` `0 <= t.length <= 104` `s` and `t` consist only of lowercase English letters.

Follow up: Suppose there are lots of incoming `s`, say `s1, s2, ..., sk` where `k >= 109`, and you want to check one by one to see if `t` has its subsequence. In this scenario, how would you change your code?

Code Snippets

C++:

```
class Solution {  
public:  
    bool isSubsequence(string s, string t) {  
  
    }  
};
```

Java:

```
class Solution {  
    public boolean isSubsequence(String s, String t) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def isSubsequence(self, s: str, t: str) -> bool:
```