

Problem 1585: Check If String Is Transformable With Substring Sort Operations

Problem Information

Difficulty: Hard

Acceptance Rate: 50.93%

Paid Only: No

Tags: String, Greedy, Sorting

Problem Description

Given two strings `s` and `t`, transform string `s` into string `t` using the following operation any number of times:

* Choose a **non-empty** substring in `s` and sort it in place so the characters are in **ascending order**. * For example, applying the operation on the underlined substring in `"1_4234_"` results in `"1_2344_"`.

Return `true` if it is possible to transform `s` into `t`. Otherwise, return `false`.

A **substring** is a contiguous sequence of characters within a string.

Example 1:

Input: `s = "84532", t = "34852"` **Output:** `true` **Explanation:** You can transform `s` into `t` using the following sort operations: `"84_53_2"` (from index 2 to 3) \rightarrow `"84_35_2"` `"_843_52"` (from index 0 to 2) \rightarrow `"_348_52"`

Example 2:

Input: `s = "34521", t = "23415"` **Output:** `true` **Explanation:** You can transform `s` into `t` using the following sort operations: `"_3452_1"` \rightarrow `"_2345_1"` `"234_51_"` \rightarrow `"234_15_"`

Example 3:

****Input:**** s = "12345", t = "12435" ****Output:**** false

****Constraints:****

* `s.length == t.length` * `1 <= s.length <= 105` * `s` and `t` consist of only digits.

Code Snippets

C++:

```
class Solution {
public:
    bool isTransformable(string s, string t) {

    }
};
```

Java:

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

    }
}
```

Python3:

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