97. Interleaving String

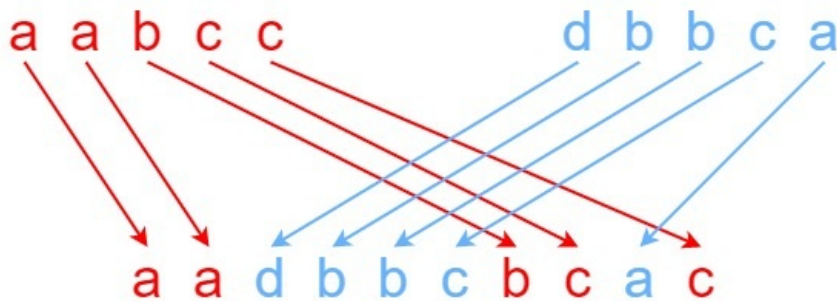# Difficulty : Medium

https://leetcode.com/problems/interleaving-string

Given strings s1, s2, and s3, find whether s3 is formed by an **interleaving** of s1 and s2.

An **interleaving** of two strings s and t is a configuration where s and t are divided into n and m substrings respectively, such that:

- s = s_1 + s_2 + ... + s_n
- t = t_1 + t_2 + ... + t_m
- |n - m| <= 1
- The **interleaving** is s_1 + t_1 + s_2 + t_2 + s_3 + t_3 + ... or t_1 + s_1 + t_2 + s_2 + t_3 + s_3 + ...

Note: a + b is the concatenation of strings a and b.

Example 1:


```
Input: s1 = "aabcc", s2 = "dbbca", s3 = "aadbbcbcac"
Output: true
Explanation: One way to obtain s3 is:
Split s1 into s1 = "aa" + "bc" + "c", and s2 into s2 = "dbbc" + "a".
Interleaving the two splits, we get "aa" + "dbbc" + "bc" + "a" + "c" = "aadbbcbcac".
Since s3 can be obtained by interleaving s1 and s2, we return true.
```

Example 2:

```
Input: s1 = "aabcc", s2 = "dbbca", s3 = "aadbbbaccc"
Output: false
Explanation: Notice how it is impossible to interleave s2 with any other string to obtain s3.
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Example 3:

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Input: s1 = "", s2 = "", s3 = ""
Output: true
```

Constraints:

- 0 <= s1.length, s2.length <= 100
- 0 <= s3.length <= 200
- s1, s2, and s3 consist of lowercase English letters.

Follow up: Could you solve it using only O(s2.length) additional memory space?