

## 1790. Check if One String Swap Can Make Strings Equal

21 June 2022 04:21 PM

You are given two strings `s1` and `s2` of equal length. A **string swap** is an operation where you choose two indices in a string (not necessarily different) and swap the characters at these indices.

Return `true` if it is possible to make both strings equal by performing **at most one string swap** on **exactly one** of the strings. Otherwise, return `false`.

Example 1:

Input: `s1 = "bank", s2 = "kanb"`

Output: `true`

Explanation: For example, swap the first character with the last character of `s2` to make "bank".

$s_1$  :                      0   1   2   3  
                            b   a   n   k  
                            ───────────  
 $s_2$  :                      k   a   n   b  
                            ───────────  
                            only one swap

$s_1.length == s_2.length$  (given)

\* Iterate over the both the string and store the index which is not same.

\* ONLY **two** index shouldn't be same, if they are more than '2' return false.

\* Then match the string after the swap.

T.C  $\Rightarrow O(n)$

```
class Solution {
public:
    bool areAlmostEqual(string s1, string s2) {
        if(s1 == s2) return true;

        vector<int> ans;
        for(int i = 0; i < (int)s2.size(); i++){
            if(s1[i] != s2[i]) ans.push_back(i);
        }

        if(ans.size() == 2){
            int x= ans[0], y = ans[1];
            if(s1[x] == s2[y] && s1[y] == s2[x]) return true;
        }

        return false;
    }
};
```