

Problem 1460: Make Two Arrays Equal by Reversing Subarrays

Problem Information

Difficulty: Easy

Acceptance Rate: 75.81%

Paid Only: No

Tags: Array, Hash Table, Sorting

Problem Description

You are given two integer arrays of equal length `target` and `arr`. In one step, you can select any **non-empty subarray** of `arr` and reverse it. You are allowed to make any number of steps.

Return `true` if you can make `arr` equal to `target` or `false` otherwise.

Example 1:

Input: `target = [1,2,3,4]`, `arr = [2,4,1,3]` **Output:** `true` **Explanation:** You can follow the next steps to convert `arr` to `target`: 1- Reverse subarray `[2,4,1]`, `arr` becomes `[1,4,2,3]` 2- Reverse subarray `[4,2]`, `arr` becomes `[1,2,4,3]` 3- Reverse subarray `[4,3]`, `arr` becomes `[1,2,3,4]` There are multiple ways to convert `arr` to `target`, this is not the only way to do so.

Example 2:

Input: `target = [7]`, `arr = [7]` **Output:** `true` **Explanation:** `arr` is equal to `target` without any reverses.

Example 3:

Input: `target = [3,7,9]`, `arr = [3,7,11]` **Output:** `false` **Explanation:** `arr` does not have value 9 and it can never be converted to `target`.

Constraints:

```
* `target.length == arr.length` * `1 <= target.length <= 1000` * `1 <= target[i] <= 1000` * `1 <= arr[i] <= 1000`
```

Code Snippets

C++:

```
class Solution {  
public:  
    bool canBeEqual(vector<int>& target, vector<int>& arr) {  
  
    }  
};
```

Java:

```
class Solution {  
    public boolean canBeEqual(int[] target, int[] arr) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def canBeEqual(self, target: List[int], arr: List[int]) -> bool:
```