

Problem 1051: Height Checker

Problem Information

Difficulty: Easy

Acceptance Rate: 81.37%

Paid Only: No

Tags: Array, Sorting, Counting Sort

Problem Description

A school is trying to take an annual photo of all the students. The students are asked to stand in a single file line in **non-decreasing order** by height. Let this ordering be represented by the integer array `expected` where `expected[i]` is the expected height of the `i`th student in line.

You are given an integer array `heights` representing the **current order** that the students are standing in. Each `heights[i]` is the height of the `i`th student in line (**0-indexed**).

Return **the number of indices** where `heights[i] != expected[i]`.

Example 1:

Input: `heights = [1,1,4,2,1,3]` **Output:** 3 **Explanation:** `heights: [1,1,4,2,1,3]`
`expected: [1,1,1,2,3,4]` Indices 2, 4, and 5 do not match.

Example 2:

Input: `heights = [5,1,2,3,4]` **Output:** 5 **Explanation:** `heights: [5,1,2,3,4]`
`expected: [1,2,3,4,5]` All indices do not match.

Example 3:

Input: `heights = [1,2,3,4,5]` **Output:** 0 **Explanation:** `heights: [1,2,3,4,5]` `expected: [1,2,3,4,5]` All indices match.

Constraints:

```
* `1 <= heights.length <= 100` * `1 <= heights[i] <= 100`
```

Code Snippets

C++:

```
class Solution {  
public:  
    int heightChecker(vector<int>& heights) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int heightChecker(int[] heights) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def heightChecker(self, heights: List[int]) -> int:
```