

## E - 1752. Check if Array Is Sorted and Rotated

Given an array `nums`, return `true` if the array was originally sorted in non-decreasing order, then rotated some number of positions (including zero). Otherwise, return `false`.

There may be duplicates in the original array.

Note: An array `A` rotated by `x` positions results in an array `B` of the same length such that  $A[i] == B[(i+x) \% A.length]$ , where `%` is the modulo operation.

### Example 1:

Input: `nums = [3,4,5,1,2]`

Output: `true`

Explanation: `[1,2,3,4,5]` is the original sorted array.

You can rotate the array by `x = 3` positions to begin on the the element of value 3: `[3,4,5,1,2]`.

### Example 2:

Input: `nums = [2,1,3,4]`

Output: `false`

Explanation: There is no sorted array once rotated that can make `nums`.

### Example 3:

Input: `nums = [1,2,3]`

Output: `true`

Explanation: `[1,2,3]` is the original sorted array.

You can rotate the array by `x = 0` positions (i.e. no rotation) to make `nums`.

## Solution:

```
class Solution {
    public boolean check(int[] nums) {
        int count = 0;
        for(int i=1 ; i<nums.length ; i++){
            if(nums[i-1]>nums[i]){
                count++;
            }
        }
        if(nums[nums.length-1]>nums[0]){
            count++;
        }
        return count<=1;
    }
}
```