

# 896. Monotonic Array

## Description

An array is **monotonic** if it is either monotone increasing or monotone decreasing.

An array `nums` is monotone increasing if for all  $i \leq j$ ,  $nums[i] \leq nums[j]$ . An array `nums` is monotone decreasing if for all  $i \leq j$ ,  $nums[i] \geq nums[j]$ .

Given an integer array `nums`, return `true` *if the given array is monotonic, or* `false` *otherwise*.

### Example 1:

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

### Example 2:

Input: `nums = [6,5,4,4]`  
Output: `true`

### Example 3:

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

### Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $-10^5 \leq \text{nums}[i] \leq 10^5$

