

# Problem 3637: Trionic Array I

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 44.85%

**Paid Only:** No

**Tags:** Array

## Problem Description

You are given an integer array `nums` of length `n`.

An array is **trionic** if there exist indices  $0 < p < q < n - 1$  such that:

\* `nums[0...p]` is **strictly** increasing, \* `nums[p...q]` is **strictly** decreasing, \* `nums[q...n - 1]` is **strictly** increasing.

Return `true` if `nums` is trionic, otherwise return `false`.

**Example 1:**

**Input:** `nums = [1,3,5,4,2,6]`

**Output:** `true`

**Explanation:**

Pick  $p = 2$ ,  $q = 4$ :

\* `nums[0...2] = [1, 3, 5]` is strictly increasing ( $1 < 3 < 5$ ). \* `nums[2...4] = [5, 4, 2]` is strictly decreasing ( $5 > 4 > 2$ ). \* `nums[4...5] = [2, 6]` is strictly increasing ( $2 < 6$ ).

**Example 2:**

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

**\*\*Output:\*\*** false

**\*\*Explanation:\*\***

There is no way to pick `p` and `q` to form the required three segments.

**\*\*Constraints:\*\***

\* `3 <= n <= 100` \* `-1000 <= nums[i] <= 1000`

## Code Snippets

### C++:

```
class Solution {
public:
    bool isTrionic(vector<int>& nums) {

    }
};
```

### Java:

```
class Solution {
    public boolean isTrionic(int[] nums) {

    }
}
```

### Python3:

```
class Solution:
    def isTrionic(self, nums: List[int]) -> bool:
```