

# 875. Longest Mountain in Array

## Difficulty : Medium

<https://leetcode.com/problems/longest-mountain-in-array>

You may recall that an array `arr` is a **mountain array** if and only if:

- `arr.length >= 3`
- There exists some index `i` (**0-indexed**) with  $0 < i < arr.length - 1$  such that:
  - `arr[0] < arr[1] < ... < arr[i - 1] < arr[i]`
  - `arr[i] > arr[i + 1] > ... > arr[arr.length - 1]`

Given an integer array `arr`, return *the length of the longest subarray, which is a mountain*. Return `0` if there is no mountain subarray.

### Example 1:

**Input:** `arr = [2,1,4,7,3,2,5]`

**Output:** `5`

**Explanation:** The largest mountain is `[1,4,7,3,2]` which has length 5.

### Example 2:

**Input:** `arr = [2,2,2]`

**Output:** `0`

**Explanation:** There is no mountain.

### Constraints:

- $1 \leq arr.length \leq 10^4$
- $0 \leq arr[i] \leq 10^4$

### Follow up:

- Can you solve it using only one pass?
- Can you solve it in  $O(1)$  space?