

845. Longest Mountain in Array

Description

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 <= arr.length <= 104`
- `0 <= arr[i] <= 104`

Follow up:

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

