

324. Wiggle Sort II

Given an integer array `nums`, reorder it such that `nums[0] < nums[1] > nums[2] < nums[3]...`

You may assume the input array always has a valid answer.

Example 1:

- **Input:** `nums = [1,5,1,1,6,4]`
- **Output:** `[1,6,1,5,1,4]`
- **Explanation:** `[1,4,1,5,1,6]` is also accepted.

Example 2:

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

Constraints:

- $1 \leq \text{nums.length} \leq 5 * 10^4$
- $0 \leq \text{nums}[i] \leq 5000$
- It is guaranteed that there will be an answer for the given input `nums`.

Follow Up: Can you do it in $O(n)$ time and/or in-place with $O(1)$ extra space?