2149. Rearrange Array Elements by Sign

Description

You are given a **0-indexed** integer array nums of **even** length consisting of an **equal** number of positive and negative integers.

You should rearrange the elements of nums such that the modified array follows the given conditions:

- 1. Every consecutive pair of integers have opposite signs.
- 2. For all integers with the same sign, the order in which they were present in nums is preserved.
- 3. The rearranged array begins with a positive integer.

Return the modified array after rearranging the elements to satisfy the aforementioned conditions.

Example 1:

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Input: nums = [3,1,-2,-5,2,-4]
Output: [3,-2,1,-5,2,-4]
Explanation:
The positive integers in nums are [3,1,2]. The negative integers are [-2,-5,-4].
The only possible way to rearrange them such that they satisfy all conditions is [3,-2,1,-5,2,-4].
Other ways such as [1,-2,2,-5,3,-4], [3,1,2,-2,-5,-4], [-2,3,-5,1,-4,2] are incorrect because they do not satisfy one or more conditions.
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Example 2:

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Input: nums = [-1,1]
Output: [1,-1]
Explanation:
1 is the only positive integer and -1 the only negative integer in nums.
So nums is rearranged to [1,-1].
```

Constraints:

- 2 <= nums.length <= 2 * 10 ⁵
- nums.length is **even**
- 1 <= |nums[i]| <= 10⁵
- nums consists of equal number of positive and negative integers.