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3667. Sort Array By Absolute Value

Premium

Solved

Easy | Topics | Hint

You are given an integer array `nums`.

Rearrange elements of `nums` in **non-decreasing** order of their absolute value.

Return **any** rearranged array that satisfies this condition.

Note: The absolute value of an integer x is defined as:

- `x` if `x >= 0`
- `-x` if `x < 0`

Example 1:

Input: `nums = [3,-1,-4,1,5]`

Output: `[-1,1,3,-4,5]`

Explanation:

- The absolute values of elements in `nums` are 3, 1, 4, 1, 5 respectively.
- Rearranging them in increasing order, we get 1, 1, 3, 4, 5.
- This corresponds to `[-1, 1, 3, -4, 5]`. Another possible rearrangement is `[1, -1, 3, -4, 5]`.

Example 2:

Input: `nums = [-100,100]`

Output: `[-100,100]`

Explanation:

- The absolute values of elements in `nums` are 100, 100 respectively.
- Rearranging them in increasing order, we get 100, 100.
- This corresponds to `[-100, 100]`. Another possible rearrangement is `[100, -100]`.

Constraints:

- `1 <= nums.length <= 100`
- `-100 <= nums[i] <= 100`

Seen this question in a real interview before? 1/5

Yes | No

Accepted 997/1.2K | Acceptance Rate 85.1%

Topics

Hint 1

Discussion (2)

Code

Python3 • Auto

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

        return sorted(nums, key=lambda x: abs(x))

```

Saved

Ln 6, Col 9

Testcase | Test Result

You must run your code first