

Problem 922: Sort Array By Parity II

Problem Information

Difficulty: Easy

Acceptance Rate: 71.13%

Paid Only: No

Tags: Array, Two Pointers, Sorting

Problem Description

Given an array of integers `nums`, half of the integers in `nums` are **odd**, and the other half are **even**.

Sort the array so that whenever `nums[i]` is odd, `i` is **odd**, and whenever `nums[i]` is even, `i` is **even**.

Return any answer array that satisfies this condition.

Example 1:

Input: `nums = [4,2,5,7]` **Output:** `[4,5,2,7]` **Explanation:** `[4,7,2,5]`, `[2,5,4,7]`, `[2,7,4,5]` would also have been accepted.

Example 2:

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

Constraints:

`2 <= nums.length <= 2 * 104` `nums.length` is even. `Half of the integers in `nums` are even.` `0 <= nums[i] <= 1000`

Follow Up: Could you solve it in-place?

Code Snippets

C++:

```
class Solution {  
public:  
    vector<int> sortArrayByParityII(vector<int>& nums) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int[] sortArrayByParityII(int[] nums) {  
  
    }  
}
```

Python3:

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