

905. Sort Array By Parity

Given an integer array `nums`, move all the even integers at the beginning of the array followed by all the odd integers.

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

Example 1:

Input: `nums = [3,1,2,4]`

Output: `[2,4,3,1]`

Explanation: The outputs `[4,2,3,1]`, `[2,4,1,3]`, and `[4,2,1,3]` would also be accepted.

Example 2:

Input: `nums = [0]`

Output: `[0]`

Constraints:

- `1 <= nums.length <= 5000`
- `0 <= nums[i] <= 5000`

```
nums.sort(key=lambda x: x%2)
return nums
#Method:2
i = 0
j = len(nums)-1
while i<j:
    val1 = nums[i]
    val2 = nums[j]
    if val1%2!=0 and val2%2==0:
        nums[i],nums[j] = nums[j],nums[i]
        i = i+1
        j = j-1
    elif val1%2!=0 and val2%2!=0:
        j = j-1
    elif val1%2==0 and val2%2==0:
        i = i+1
    elif val1%2==0 and val2%2!=0:
        i = i+1
```

```
        j = j-1  
    return nums
```