

# 922. Sort Array By Parity II

## 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?

