

مثال 1

- Input: `nums = [2, 0, 2, 1, 1, 0]`
- Output: `[0, 0, 1, 1, 2, 2]`

مثال 2

- Input: `nums = [2, 0, 1]`
- Output: `[0, 1, 2]`

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- $n == \text{nums.length}$
- $1 \leq n \leq 300$
- `nums[i]` is either 0, 1, or 2.

Explanation

Given an array `nums` containing n objects colored red, white, or blue, we need to sort them in place so that objects of the same color are adjacent, with the colors in the order red, white, and blue. Here, integers 0, 1, and 2 are used to represent the colors red, white, and blue respectively. The task is to solve this problem without using the library's sort function.

Here are the examples provided in the image:

1. Example 1

- Input: `nums = [2, 0, 2, 1, 1, 0]`
- Output: `[0, 0, 1, 1, 2, 2]`

2. Example 2

- Input: `nums = [2, 0, 1]`
- Output: `[0, 1, 2]`

Constraints

- $n == \text{nums.length}$
- $1 \leq n \leq 300$
- `nums[i]` is either 0, 1, or 2.