

75. Sort Colors

Hint

Given an array `nums` with `n` objects colored red, white, or blue, sort them in-place so that objects of the same color are adjacent, with the colors in the order red, white, and blue.

We will use the integers 0, 1, and 2 to represent the color red, white, and blue, respectively.

You must solve this problem without using the library's sort function.

Example 1:

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

Example 2:

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

Constraints:

- `n == nums.length`
- `1 <= n <= 300`
- `nums[i]` is either 0, 1, or 2.

Follow up: Could you come up with a one-pass algorithm using only constant extra space?