## **Sort Colors**

Given an array nums with n objects colored red, white, or blue, sort them <u>in-place</u> 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.