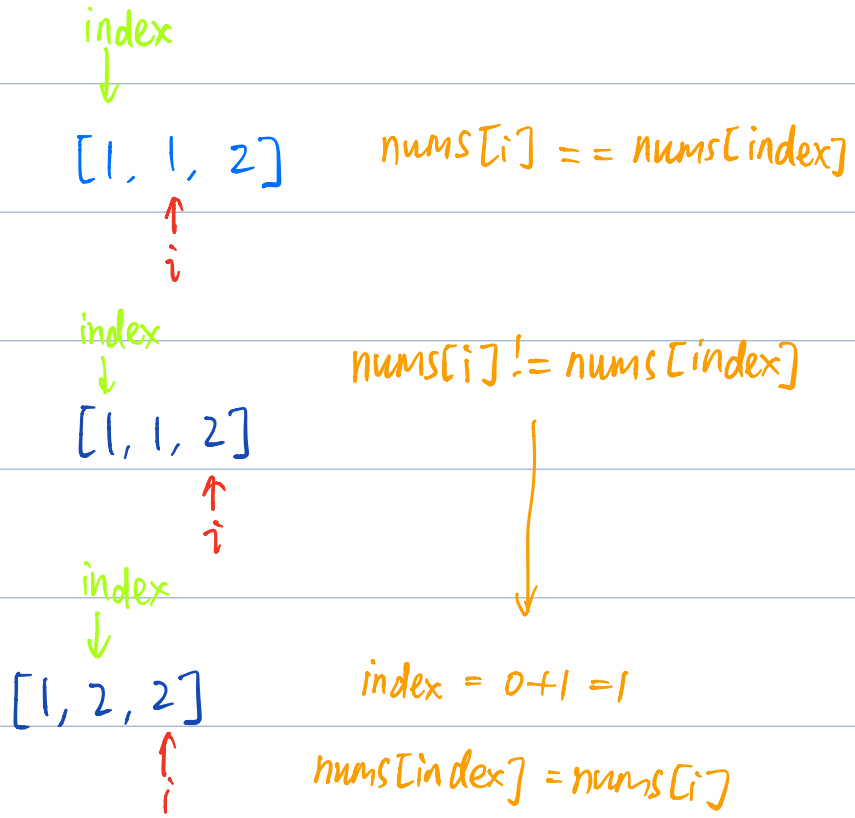
Leet code 26

Given sorted array, remove duplicates in place

- elements appear only once
- returns new length
- space complexity O(1)

Eg. input: nums = [1, 1, 2]

output: 2, nums = [1, 2]



Leetcode 80

Given sorted array, duplicates appear at most twice.

Eg. input: nums = [1, 1, 1, 2, 2, 3]

output: 5, nums = [1, 1, 2, 2, 3]

index Count = 1

[1, 1, 1, 2, 2, 3]

i

nums[i] == nums[index]

Count = 1+1 = 2

index = 0+1 = 1

nums[index] = nums[i]

index Count = 2

[1, 1, 1, 2, 2, 3]

i

nums[i] == nums[index]

Count >= max_count

Count = 2+1 = 3

index Count = 2

[1, 1, 1, 2, 2, 3]

i

index Count = 3

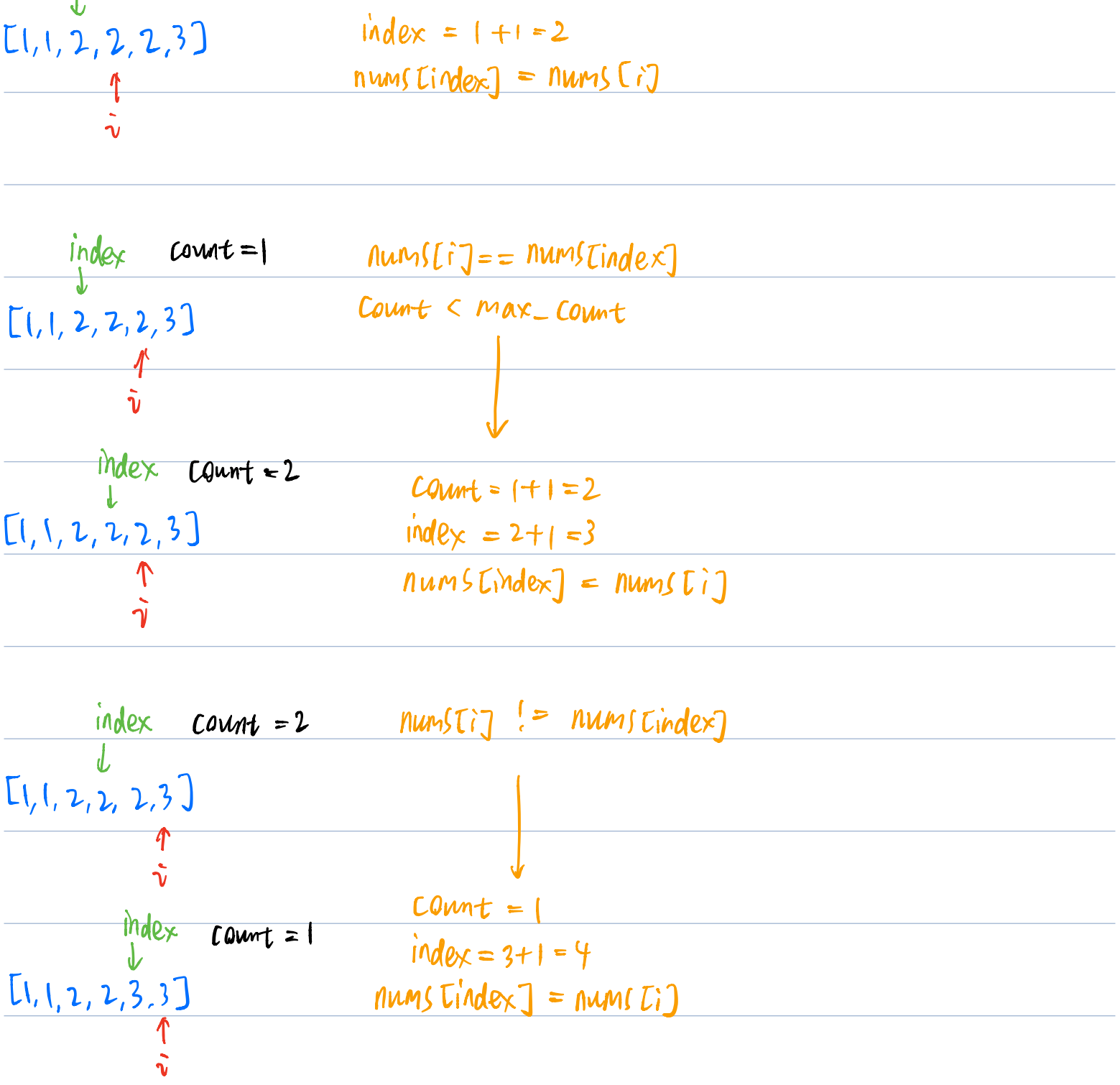
[1, 1, 1, 2, 2, 3]

i

nums[i] != nums[index]

index Count = 1

Count = 1


[1,1,2,2,2,3]
i
index = 1+1=2
nums[index] = nums[i]
index
count=1
[1,1,2,2,2,3]
i
nums[i]== nums[index]
count < max_count
index
count=2
[1,1,2,2,2,3]
i
count = 1+1=2
index = 2+1=3
nums[index] = nums[i]
index
count=2
[1,1,2,2,2,3]
i
nums[i] != nums[index]
index
count=1
[1,1,2,2,3,3]
i
count = 1
index = 3+1=4
nums[index] = nums[i]