[**80. Remove Duplicates from Sorted Array II**](https://leetcode.com/problems/remove-duplicates-from-sorted-array-ii/)

Solved

Medium

Topics

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Given an integer array nums sorted in **non-decreasing order**, remove some duplicates [**in-place**](https://en.wikipedia.org/wiki/In-place_algorithm) such that each unique element appears **at most twice**. The **relative order** of the elements should be kept the **same**.

Since it is impossible to change the length of the array in some languages, you must instead have the result be placed in the **first part** of the array nums. More formally, if there are k elements after removing the duplicates, then the first k elements of nums should hold the final result. It does not matter what you leave beyond the first k elements.

Return k*after placing the final result in the first*k*slots of*nums.

Do **not** allocate extra space for another array. You must do this by **modifying the input array**[**in-place**](https://en.wikipedia.org/wiki/In-place_algorithm) with O(1) extra memory.

**Custom Judge:**

The judge will test your solution with the following code:

int[] nums = [...]; // Input array

int[] expectedNums = [...]; // The expected answer with correct length

int k = removeDuplicates(nums); // Calls your implementation

assert k == expectedNums.length;

for (int i = 0; i < k; i++) {

assert nums[i] == expectedNums[i];

}

If all assertions pass, then your solution will be **accepted**.

**Example 1:**

**Input:** nums = [1,1,1,2,2,3]

**Output:** 5, nums = [1,1,2,2,3,\_]

**Explanation:** Your function should return k = 5, with the first five elements of nums being 1, 1, 2, 2 and 3 respectively.

It does not matter what you leave beyond the returned k (hence they are underscores).

**Example 2:**

**Input:** nums = [0,0,1,1,1,1,2,3,3]

**Output:** 7, nums = [0,0,1,1,2,3,3,\_,\_]

**Explanation:** Your function should return k = 7, with the first seven elements of nums being 0, 0, 1, 1, 2, 3 and 3 respectively.

It does not matter what you leave beyond the returned k (hence they are underscores).

**Constraints:**

* 1 <= nums.length <= 3 \* 104
* -104 <= nums[i] <= 104
* nums is sorted in **non-decreasing** order.