**189. Rotate Array**

Medium

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Given an array, rotate the array to the right by *k* steps, where *k* is non-negative.

**Follow up:**

* Try to come up as many solutions as you can, there are at least 3 different ways to solve this problem.
* Could you do it in-place with O(1) extra space?

**Example 1:**

**Input:** nums = [1,2,3,4,5,6,7], k = 3

**Output:** [5,6,7,1,2,3,4]

**Explanation:**

rotate 1 steps to the right: [7,1,2,3,4,5,6]

rotate 2 steps to the right: [6,7,1,2,3,4,5]

rotate 3 steps to the right: [5,6,7,1,2,3,4]

**Example 2:**

**Input:** nums = [-1,-100,3,99], k = 2

**Output:** [3,99,-1,-100]

**Explanation:**

rotate 1 steps to the right: [99,-1,-100,3]

rotate 2 steps to the right: [3,99,-1,-100]

**Constraints:**

* 1 <= nums.length <= 2 \* 104
* -231 <= nums[i] <= 231 - 1
* 0 <= k <= 105