Given a non-empty array of integers nums, every element appears twice except for one. Find that single one.

You must implement a solution with a linear runtime complexity and use only constant extra space.

Example 1:

Input: nums = [2,2,1]

Output: 1

Example 2:

Input: nums = [4,1,2,1,2]

Output: 4

Example 3:

Input: nums = [1]

Output: 1

Constraints:

1 <= nums.length <= 3 \* 104

-3 \* 104 <= nums[i] <= 3 \* 104

Each element in the array appears twice except for one element which appears only once.