

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.