136. Single Number

Description

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 * 10 4
- $-3 * 10^4 \le nums[i] \le 3 * 10^4$
- Each element in the array appears twice except for one element which appears only once.