

## Leetcode Problem 2. (Easy)

### Single Number

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:

- $1 \leq \text{nums.length} \leq 3 \times 10^4$
- $-3 \times 10^4 \leq \text{nums}[i] \leq 3 \times 10^4$
- Each element in the array appears twice except for one element which appears only once.

Link: <https://leetcode.com/problems/single-number/>

```
class Solution {  
    public int singleNumber(int[] nums) {  
  
        int result = 0;  
        for (int num : nums) {  
            result ^= num;  
        }  
        return result;  
    }  
}
```

LeetCode

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Problem List

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Premium

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Description

Editorial

Solutions (7.7K)

Submissions

Accepted

Next question

137. Single Number II

More challenges

137. Single Number II

260. Single Number III

268. Missing Number

All statuses

All languages

Accepted

a few seconds ago

Java

Sakib Rahman

May 04, 2023 19:55

Details

+ Solution

Java

Runtime 1 ms

Beats 100%

Memory 42.8 MB

Beats 63.80%

Click the distribution chart to view more details

Notes

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Console

Run

Submit