

# Problem 137: Single Number II

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 66.22%

**Paid Only:** No

**Tags:** Array, Bit Manipulation

## Problem Description

Given an integer array `nums` where every element appears **three times** except for one, which appears **exactly once**. Find the single element and return it.

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

**Example 1:**

**Input:** `nums = [2,2,3,2]` **Output:** `3`

**Example 2:**

**Input:** `nums = [0,1,0,1,0,1,99]` **Output:** `99`

**Constraints:**

`1 <= nums.length <= 3 * 104` `-231 <= nums[i] <= 231 - 1` Each element in `nums` appears exactly **three times** except for one element which appears **once**.

## Code Snippets

**C++:**

```
class Solution {  
public:
```

```
int singleNumber(vector<int>& nums) {  
  
}  
};
```

### Java:

```
class Solution {  
    public int singleNumber(int[] nums) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def singleNumber(self, nums: List[int]) -> int:
```