

<https://course.acciojob.com/idle?question=22d4d855-f293-4437-91ec-83f03735ef79>

MEDIUM

Max Score: 40 Points

Unique Number in a Triplet Array

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.

Input Format

The first line contains `n` which denotes the size of array.

Next line contains `n` space separated integers which denotes the array.

Output Format

Return the single element present in the array.

Example 1

Input

4

2 2 3 2

Output

3

Example 2

Input

7

2 2 2 4 4 4 5

Output

5

Constraints

$1 \leq \text{nums.length} \leq 3 \cdot 10^4$

$-2^{31} \leq \text{nums}[i] \leq 2^{31} - 1$

Each element in `nums` appears exactly three times except for one element which appears once.

Topic Tags

Bit Manipulation

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;

class Solution{
    public static int singleNumber(int[] nums) {
        // Your code here
        Arrays.sort(nums);
        int n=nums.length;
        if(n==1)
            return nums[0];
        int i=0;
        while(i<n-3)
        {
            if(nums[i]!=nums[i+1])
                return nums[i];
            i=i+3;
        }
        return nums[n-1];
    }
}

public class Main {
    public static void main (String[] args)
    {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
```

```
int[] nums = new int[n];  
for (int i = 0; i < n; i++) {  
    nums[i] = sc.nextInt();  
}  
System.out.println(Solution.singleNumber(nums));  
}  
}
```