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Badge Progress (Details)

Points: 126   Rank: 270332

Lonely Integer 🔖

by dheeraj

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Consider an array of n integers, $A = [a_0, a_1, \ldots, a_{n-1}]$, where all but one of the integers occur in pairs. In other words, every element in A occurs exactly twice except for one unique element.

Given A, find and print the unique element.

Input Format

The first line contains a single integer, n, denoting the number of integers in the array.
The second line contains n space-separated integers describing the respective values in A.

Constraints

- $1 \le n < 100$

- It is guaranteed that n is an odd number.

- $0 \le a_i \le 100$, where $0 \le i < n$.

Output Format

Print the unique number that occurs only once in A on a new line.

Sample Input 0

```
1
1
```

Sample Output 0

```
1
```

Explanation 0
The array only contains a single 1, so we print 1 as our answer.

Sample Input 1

```
3
1 1 2
```

Sample Output 1

```
2
```

Explanation 1
We have two 1's and one 2. We print 2, because that's the only unique element in the array.

Sample Input 2

```
5
0 0 1 2 1
```

Sample Output 2

```
2
```

Explanation 2

We have two 0's, two 1's, and one 2. We print 2, because that's the only unique element in the array.

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Submissions:89553

Max Score:20
Difficulty: Easy

Rate This Challenge:
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Current Buffer (saved locally, editable)   ⑂ 🕓 | Java 7   ⌄ | ⤢   ⚙

```java
1  import java.io.*;
2  import java.util.*;
3  import java.text.*;
4  import java.math.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      static int lonelyinteger(int[] a) {
10         // Complete this function
11     }
12
13     public static void main(String[] args) {
14         Scanner in = new Scanner(System.in);
15         int n = in.nextInt();
16         int[] a = new int[n];
17         for(int a_i = 0; a_i < n; a_i++){
18             a[a_i] = in.nextInt();
19         }
20         int result = lonelyinteger(a);
21         System.out.println(result);
22     }
23  }
24
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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