

Lonely Integer

Given an array of integers, where all elements but one occur twice, find the unique element.

Example

$a = [1, 2, 3, 4, 3, 2, 1]$

The unique element is 4.

Function Description

Complete the *lonelyinteger* function in the editor below.

lonelyinteger has the following parameter(s):

- *int a[n]*: an array of integers

Returns

- *int*: the element that occurs only once

Input Format

The first line contains a single integer, *n*, the number of integers in the array.

The second line contains *n* space-separated integers that describe the values in *a*.

Constraints

- $1 \leq n < 100$
- It is guaranteed that *n* is an odd number and that there is one unique element.
- $0 \leq a[i] \leq 100$, where $0 \leq i < n$.

Sample Input 0

1
1

Sample Output 0

1

Explanation 0

There is only one element in the array, thus it is unique.

Sample Input 1

3

```
1 1 2
```

Sample Output 1

```
2
```

Explanation 1

We have two **1**'s, and **2** is unique.

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**. **2** is unique.