

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.