# **Lonely Integer**

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 < 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

3 112

# 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**

# **Explanation 2**

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