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**

- $1 \le n < 100$
- 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

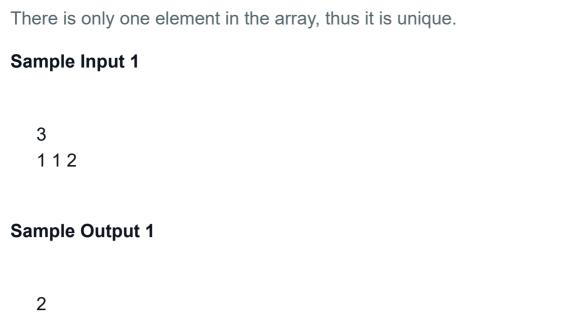
1

1

### Sample Output 0

1

## **Explanation 0**



# **Explanation 1**

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

# Sample Input 2

5 00121

# Sample Output 2

2

# **Explanation 2**

We have two  $\mathbf{0}$ 's, two  $\mathbf{1}$ 's, and one  $\mathbf{2}$ .  $\mathbf{2}$  is unique.