

Bit Manipulation: Lonely Integer

Consider an array of n integers, $A = [a_0, a_1, \dots, a_{n-1}]$, 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

- $1 \leq n < 100$
- It is guaranteed that n is an odd number.
- $0 \leq a_i \leq 100$, where $0 \leq i < n$.

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.