

# 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  $0 \leq i < n$ .