

# 540. Single Element in a Sorted Array

## Description

You are given a sorted array consisting of only integers where every element appears exactly twice, except for one element which appears exactly once.

Return *the single element that appears only once*.

Your solution must run in  $O(\log n)$  time and  $O(1)$  space.

### Example 1:

**Input:** `nums = [1,1,2,3,3,4,4,8,8]`

**Output:** `2`

### Example 2:

**Input:** `nums = [3,3,7,7,10,11,11]`

**Output:** `10`

### Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $0 \leq \text{nums}[i] \leq 10^5$

