

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

**Follow up:** Your solution should 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 <= nums.length <= 10^5`
- `0 <= nums[i] <= 10^5`