

1060. Missing Element in Sorted Array

Description

Given an integer array `nums` which is sorted in **ascending order** and all of its elements are **unique** and given also an integer `k`, return the `kth` missing number starting from the leftmost number of the array.

Example 1:

Input: `nums = [4,7,9,10]`, `k = 1`

Output: 5

Explanation: The first missing number is 5.

Example 2:

Input: `nums = [4,7,9,10]`, `k = 3`

Output: 8

Explanation: The missing numbers are `[5,6,8,...]`, hence the third missing number is 8.

Example 3:

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

Output: 6

Explanation: The missing numbers are `[3,5,6,7,...]`, hence the third missing number is 6.

Constraints:

- `1 <= nums.length <= 5 * 104`
- `1 <= nums[i] <= 107`
- `nums` is sorted in **ascending order**, and all the elements are **unique**.
- `1 <= k <= 108`

Follow up: Can you find a logarithmic time complexity (i.e., `O(log(n))`) solution?

