Given an array arr of positive integers sorted in a **strictly increasing order**, and an integer k.

Return *the* kth ***positive*** *integer that is* ***missing*** *from this array.*

**Example 1:**

Input: arr = [2,3,4,7,11], k = 5  
Output: 9  
Explanation: The missing positive integers are [1,5,6,8,9,10,12,13,...]. The 5th missing positive integer is 9.

**Example 2:**

Input: arr = [1,2,3,4], k = 2  
Output: 6  
Explanation: The missing positive integers are [5,6,7,...]. The 2nd missing positive integer is 6.

**Constraints:**

* 1 <= arr.length <= 1000
* 1 <= arr[i] <= 1000
* 1 <= k <= 1000
* arr[i] < arr[j] for 1 <= i < j <= arr.length

**Follow up:**

Could you solve this problem in less than O(n) complexity?