

41. First Missing Positive

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Given an unsorted integer array `nums`, return the smallest missing positive integer.

You must implement an algorithm that runs in $O(n)$ time and uses $O(1)$ auxiliary space.

Example 1:

Input: `nums = [1,2,0]`
Output: `3`
Explanation: The numbers in the range `[1,2]` are all in the array.

Example 2:

Input: `nums = [3,4,-1,1]`
Output: `2`
Explanation: `1` is in the array but `2` is missing.

Example 3:

Input: `nums = [7,8,9,11,12]`
Output: `1`
Explanation: The smallest positive integer `1` is missing.

Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $-2^{31} \leq \text{nums}[i] \leq 2^{31} - 1$

Seen this question in a real interview before? 1/4

☒ Yes ☐ No

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 Topics

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 Hint 1

 Hint 2

 Hint 3

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