

The Algorithm Design Canvas

Problem name: Missing Number

HIRED IN TECH

Constraints



- (nums: int[]) --> int
1. nums[i] distinct, range 0:n
 2. n == nums.length
 3. $1 \leq n \leq 10^4$
 4. $0 \leq \text{nums}[i] \leq n$

Ideas



1. Quick Sort.
2. return i != nums[i]

O(n)

O(1)

Xor sum

O(n)

O(1)

Test Cases



- [3,0,1] -> 2
[0,1] -> 2
[9,6,4,2,3,5,7,0,1] -> 8

Code

