Problem 3678: Smallest Absent Positive Greater Than Average

Problem Information

Difficulty: Easy
Acceptance Rate: 33.71%
Paid Only: No
Tags: Array, Hash Table

Problem Description

You are given an integer array `nums`.

Return the **smallest absent positive** integer in `nums` such that it is **strictly greater** than the **average** of all elements in `nums`.

The **average** of an array is defined as the sum of all its elements divided by the number of elements.

Example 1:

Input: nums = [3,5]

Output: 6

Explanation:

* The average of `nums` is `(3 + 5) / 2 = 8 / 2 = 4`. * The smallest absent positive integer greater than 4 is 6.

Example 2:

Input: nums = [-1,1,2]

Output: 3

Explanation:

* ■■■■■■■The average of `nums` is `(-1 + 1 + 2) / 3 = 2 / 3 = 0.667`. * The smallest absent positive integer greater than 0.667 is 3.

Example 3:

Input: nums = [4,-1]

Output: 2

Explanation:

* The average of `nums` is `(4 + (-1)) / 2 = 3 / 2 = 1.50`. * The smallest absent positive integer greater than 1.50 is 2.

Constraints:

* `1 <= nums.length <= 100` * `-100 <= nums[i] <= 100`

Code Snippets

C++:

```
class Solution {
public:
int smallestAbsent(vector<int>& nums) {

}
};
```

Java:

```
class Solution {
public int smallestAbsent(int[] nums) {

}
}
```

Python3:

```
class Solution:
def smallestAbsent(self, nums: List[int]) -> int:
```