

# 2530. Minimize Maximum of Array

## Difficulty : Medium

<https://leetcode.com/problems/minimize-maximum-of-array>

You are given a **0-indexed** array `nums` comprising of `n` non-negative integers.

In one operation, you must:

- Choose an integer `i` such that  $1 \leq i < n$  and `nums[i] > 0`.
- Decrease `nums[i]` by 1.
- Increase `nums[i - 1]` by 1.

Return the **minimum** possible value of the **maximum** integer of `nums` after performing **any** number of operations.

### Example 1:

**Input:** `nums = [3,7,1,6]`

**Output:** 5

**Explanation:**

One set of optimal operations is as follows:

1. Choose `i = 1`, and `nums` becomes `[4,6,1,6]`.
2. Choose `i = 3`, and `nums` becomes `[4,6,2,5]`.
3. Choose `i = 1`, and `nums` becomes `[5,5,2,5]`.

The maximum integer of `nums` is 5. It can be shown that the maximum number cannot be less than 5.

Therefore, we return 5.

### Example 2:

**Input:** `nums = [10,1]`

**Output:** 10

**Explanation:**

It is optimal to leave `nums` as is, and since 10 is the maximum value, we return 10.

### Constraints:

- `n == nums.length`
- $2 \leq n \leq 10^5$
- $0 \leq \text{nums}[i] \leq 10^9$