

2422. Merge Operations to Turn Array Into a Palindrome

Description

You are given an array `nums` consisting of **positive** integers.

You can perform the following operation on the array **any** number of times:

- Choose any two **adjacent** elements and **replace** them with their **sum**.
 - For example, if `nums = [1, 2, 3, 1]`, you can apply one operation to make it `[1, 5, 1]`.

Return *the **minimum** number of operations needed to turn the array into a **palindrome***.

Example 1:

Input: `nums = [4,3,2,1,2,3,1]`

Output: 2

Explanation: We can turn the array into a palindrome in 2 operations as follows:

- Apply the operation on the fourth and fifth element of the array, `nums` becomes equal to `[4,3,2, 3, 3, 1]`.
- Apply the operation on the fifth and sixth element of the array, `nums` becomes equal to `[4,3,2,3, 4]`.

The array `[4,3,2,3,4]` is a palindrome.

It can be shown that 2 is the minimum number of operations needed.

Example 2:

Input: `nums = [1,2,3,4]`

Output: 3

Explanation: We do the operation 3 times in any position, we obtain the array `[10]` at the end which is a palindrome.

Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^6$

