

# 2422. Merge Operations to Turn Array Into a Palindrome Premium

Medium Topics Companies Hint

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 <= nums.length <= 105`
- `1 <= nums[i] <= 106`

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Yes No

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### Hint 1

Can you find how many operations are needed to make the first element of the array equal to the last element?

### Hint 2

Notice that you can use the same idea of the previous hint to make the second element equal to the second last one.

### Hint 3

Use the same idea until all elements of the array are used.

### Discussion (9)