2448. Minimum Cost to Make Array Equal

Hint

Hard 2.2K 28

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You are given two **0-indexed** arrays `nums` and `cost` consisting each of `n` **positive** integers.

You can do the following operation **any** number of times:

- Increase or decrease **any** element of the array `nums` by `1`.

The cost of doing one operation on the `i`th element is `cost[i]`.

Return *the **minimum** total cost such that all the elements of the array* `nums` *become **equal**.*

Example 1:

Input: nums = [1,3,5,2], cost = [2,3,1,14]
Output: 8
Explanation: We can make all the elements equal to 2 in the following way:
- Increase the 0th element one time. The cost is 2.
- Decrease the 1st element one time. The cost is 3.
- Decrease the 2nd element three times. The cost is 1 + 1 + 1 = 3.
The total cost is 2 + 3 + 3 = 8.
It can be shown that we cannot make the array equal with a smaller cost.

Example 2:

Input: nums = [2,2,2,2,2], cost = [4,2,8,1,3]
Output: 0
Explanation: All the elements are already equal, so no operations are needed.

Constraints:

- `n == nums.length == cost.length`
- `1 <= n <= 10^5`
- `1 <= nums[i], cost[i] <= 10^6`
- Test cases are generated in a way that the output doesn't exceed $2^{53}-1$

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Yes No

Discussion (77)

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