2740. Find the Value of the Partition

Description

You are given a **positive** integer array `nums` .

Partition `nums` into two arrays, `nums1` and `nums2` , such that:

- Each element of the array `nums` belongs to either the array `nums1` or the array `nums2` .
- Both arrays are **non-empty** .
- The value of the partition is **minimized** .

The value of the partition is `|max(nums1) - min(nums2)|` .

Here, `max(nums1)` denotes the maximum element of the array `nums1` , and `min(nums2)` denotes the minimum element of the array `nums2` .

Return *the integer denoting the value of such partition* .

Example 1:

```
Input: nums = [1,3,2,4]
Output: 1
Explanation: We can partition the array nums into nums1 = [1,2] and nums2 = [3,4].
- The maximum element of the array nums1 is equal to 2.
- The minimum element of the array nums2 is equal to 3.
The value of the partition is |2 - 3| = 1.
It can be proven that 1 is the minimum value out of all partitions.
```

Example 2:

```
Input: nums = [100,1,10]
Output: 9
Explanation: We can partition the array nums into nums1 = [10] and nums2 = [100,1].
- The maximum element of the array nums1 is equal to 10.
- The minimum element of the array nums2 is equal to 1.
The value of the partition is |10 - 1| = 9.
It can be proven that 9 is the minimum value out of all partitions.
```

Constraints:

- $2 <= nums.length <= 10^5$
- $1 <= nums[i] <= 10^9$