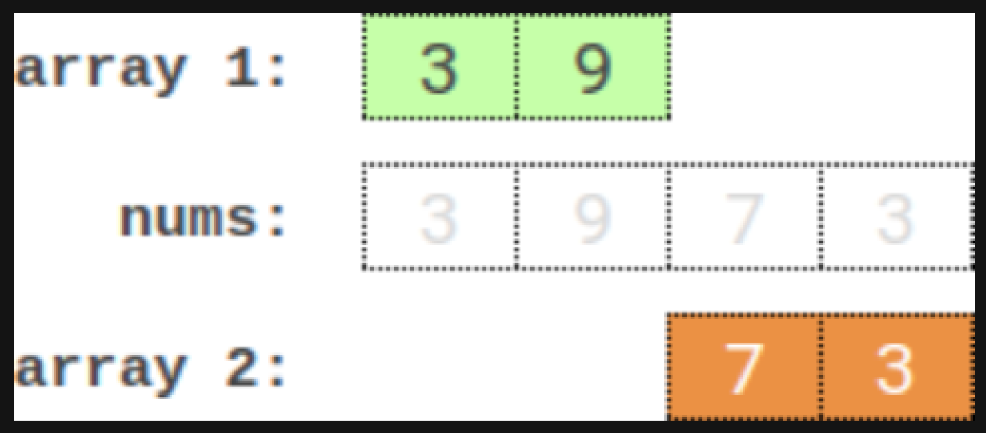
2035. Partition Array Into Two Arrays to Minimize Sum Difference

Description

You are given an integer array `nums` of `2 * n` integers. You need to partition `nums` into **two** arrays of length `n` to **minimize the absolute difference** of the **sums** of the arrays. To partition `nums`, put each element of `nums` into **one** of the two arrays.

Return *the **minimum** possible absolute difference*.

Example 1:

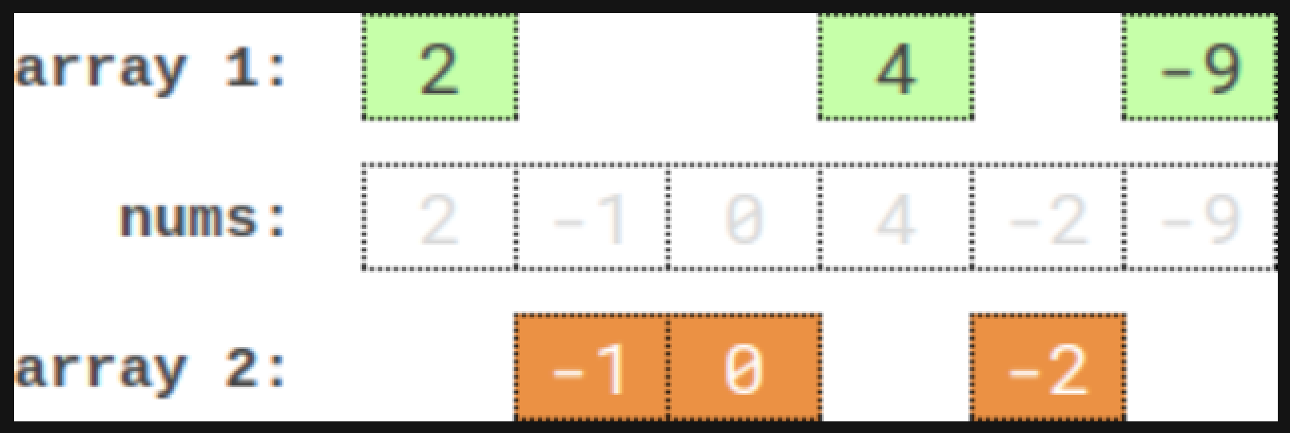


```
Input: nums = [3,9,7,3]
Output: 2
Explanation: One optimal partition is: [3,9] and [7,3].
The absolute difference between the sums of the arrays is abs((3 + 9) - (7 + 3)) = 2.
```

Example 2:

```
Input: nums = [-36,36]
Output: 72
Explanation: One optimal partition is: [-36] and [36].
The absolute difference between the sums of the arrays is abs((-36) - (36)) = 72.
```

Example 3:



```
Input: nums = [2,-1,0,4,-2,-9]
Output: 0
Explanation: One optimal partition is: [2,4,-9] and [-1,0,-2].
The absolute difference between the sums of the arrays is abs((2 + 4 + -9) - (-1 + 0 + -2)) = 0.
```

Constraints:

- `1 <= n <= 15`
- `nums.length == 2 * n`
- -10^{7} `<= nums[i] <=` 10^{7}