

# Problem 2567: Minimum Score by Changing Two Elements

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 49.59%

**Paid Only:** No

**Tags:** Array, Greedy, Sorting

## Problem Description

You are given an integer array `nums`.

\* The \*\*low\*\* score of `nums` is the \*\*minimum\*\* absolute difference between any two integers.  
\* The \*\*high\*\* score of `nums` is the \*\*maximum\*\* absolute difference between any two integers.  
\* The \*\*score\*\* of `nums` is the sum of the \*\*high\*\* and \*\*low\*\* scores.

Return the \*\*minimum score\*\* after \*\*changing two elements\*\* of `nums`.

**Example 1:**

**Input:** nums = [1,4,7,8,5]

**Output:** 3

**Explanation:**

\* Change `nums[0]` and `nums[1]` to be 6 so that `nums` becomes [6,6,7,8,5].  
\* The low score is the minimum absolute difference:  $|6 - 6| = 0$ .  
\* The high score is the maximum absolute difference:  $|8 - 5| = 3$ .  
\* The sum of high and low score is 3.

**Example 2:**

**Input:** nums = [1,4,3]

**\*\*Output:\*\*** 0

**\*\*Explanation:\*\***

\* Change `nums[1]` and `nums[2]` to 1 so that `nums` becomes [1,1,1]. \* The sum of maximum absolute difference and minimum absolute difference is 0.

**\*\*Constraints:\*\***

\* `3 <= nums.length <= 105` \* `1 <= nums[i] <= 109`

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int minimizeSum(vector<int>& nums) {  
  
    }  
};
```

**Java:**

```
class Solution {  
public int minimizeSum(int[] nums) {  
  
}  
}
```

**Python3:**

```
class Solution:  
    def minimizeSum(self, nums: List[int]) -> int:
```