

Problem 1300: Sum of Mutated Array Closest to Target

Problem Information

Difficulty: Medium

Acceptance Rate: 45.88%

Paid Only: No

Tags: Array, Binary Search, Sorting

Problem Description

Given an integer array `arr` and a target value `target`, return the integer `value` such that when we change all the integers larger than `value` in the given array to be equal to `value`, the sum of the array gets as close as possible (in absolute difference) to `target`.

In case of a tie, return the minimum such integer.

Notice that the answer is not necessarily a number from `arr`.

Example 1:

Input: `arr = [4,9,3], target = 10` **Output:** `3` **Explanation:** When using 3 `arr` converts to `[3, 3, 3]` which sums 9 and that's the optimal answer.

Example 2:

Input: `arr = [2,3,5], target = 10` **Output:** `5`

Example 3:

Input: `arr = [60864,25176,27249,21296,20204], target = 56803` **Output:** `11361`

Constraints:

`1 <= arr.length <= 104` `1 <= arr[i], target <= 105`

Code Snippets

C++:

```
class Solution {  
public:  
    int findBestValue(vector<int>& arr, int target) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int findBestValue(int[] arr, int target) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def findBestValue(self, arr: List[int], target: int) -> int:
```