Problem 1385: Find the Distance Value Between Two Arrays

Problem Information

Difficulty: Easy
Acceptance Rate: 71.01%
Paid Only: No
Tags: Array, Two Pointers, Binary Search, Sorting

Problem Description

Given two integer arrays `arr1` and `arr2`, and the integer `d`, _return the distance value between the two arrays_.

The distance value is defined as the number of elements `arr1[i]` such that there is not any element `arr2[j]` where `|arr1[i]-arr2[j]| <= d`.

Example 1:

Input: arr1 = [4,5,8], arr2 = [10,9,1,8], d = 2 **Output:** 2 **Explanation:** For arr1[0]=4 we have: |4-10|=6 > d=2 |4-9|=5 > d=2 |4-1|=3 > d=2 |4-8|=4 > d=2 For arr1[1]=5 we have: |5-10|=5 > d=2 |5-9|=4 > d=2 |5-1|=4 > d=2 |5-8|=3 > d=2 For arr1[2]=8 we have: **|8-10|=2 <= d=2** **|8-9|=1 <= d=2** |8-1|=7 > d=2 **|8-8|=0 <= d=2**

Example 2:

Input: arr1 = [1,4,2,3], arr2 = [-4,-3,6,10,20,30], d = 3 **Output:** 2

Example 3:

Input: arr1 = [2,1,100,3], arr2 = [-5,-2,10,-3,7], d = 6 **Output:** 1

Constraints:

* `1 <= arr1.length, arr2.length <= 500` * `-1000 <= arr1[i], arr2[j] <= 1000` * `0 <= d <= 100`

Code Snippets

C++:

```cpp
class Solution {
public:
    int findTheDistanceValue(vector<int>& arr1, vector<int>& arr2, int d) {


    }
};
```

Java:

```java
class Solution {
    public int findTheDistanceValue(int[] arr1, int[] arr2, int d) {


    }
}
```

Python3:

```python
class Solution:
    def findTheDistanceValue(self, arr1: List[int], arr2: List[int], d: int) ->
    int:
```