Badge Progress (Details)

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Pairs 🔖

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Given N integers, count the number of pairs of integers whose difference is K.

Submissions: 32369
Max Score: 50
Difficulty: Medium

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Input Format

The first line contains N and K.
The second line contains N numbers of the set. All the N numbers are unique.

Need Help?

Constraints

Two Pointer Technique

- $2 \leq N \leq 10^5$

Greedy Technique

- $0 < K < 10^9$

Dictionary

- Each integer will be greater than 0 and at least K smaller than $2^{31} - 1$.

Sorting

Output Format

More

An integer that tells the number of pairs of integers whose difference is K.

Sample Input

```
5 2
1 5 3 4 2
```

Sample Output

```
3
```

Explanation

There are 3 pairs of integers in the set with a difference of 2.

Current Buffer (saved locally, editable)   C#

```
1  ▶ ↔        static int pairs(int[] a, int k) {
7
8
9             int cont = 0;
10
11              Array.Sort(a);
12
13             for (int i = 0; i < a.Length; i++)
14 ▼           {
15                 for (int j = i + 1; j < a.Length && a[i] < a[j]; j++)
16 ▼             {
17                     if (a[j] - a[i] == k)
18 ▼                 {
19                         cont++;
20                     }
21                     else if (a[j] - a[i] > k)
22 ▼                 {
23                         break;
24                     }
25                 }
26             }
27
28
```

```
29              return cont;
30      }
31  ▶  ↔
```

Line: 29 Col: 25

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

Congrats, you solved this challenge!

✔ Test Case #0   ✔ Test Case #1   ✔ Test Case #2
✔ Test Case #3   ✔ Test Case #4   ✔ Test Case #5
✔ Test Case #6   ✔ Test Case #7   ✔ Test Case #8
✔ Test Case #9   ✔ Test Case #10   ✔ Test Case #11
✔ Test Case #12   ✔ Test Case #13   ✔ Test Case #14
✔ Test Case #15   ✔ Test Case #16

Next Challenge

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