| | |
|---|---|
| Full Name: | Remi Chartier |
| Email: | remipr.chartier@gmail.com |
| Test Name: | **Mock Test** |
| Taken On: | 30 Oct 2021 06:41:56 IST |
| Time Taken: | 6 min 33 sec/ 25 min |
| Contact Number: | +14084751573 |
| Linkedin: | http://www.linkedin.com/in/remichartier |
| Invited by: | Ankush |
| Invited on: | 30 Oct 2021 06:41:50 IST |
| Skills Score: | |
| Tags Score: | Algorithms 45/75<br>Core CS 45/75<br>Medium 45/75<br>Search 45/75<br>problem-solving 45/75 |

**60%**

**45/75**

scored in **Mock Test** in 6 min 33 sec on 30 Oct 2021 06:41:56 IST

**Recruiter/Team Comments:**

*No Comments.*

| | Question Description | Time Taken | Score | Status |
|---|---|---|---|---|
| Q1 | Pairs > **Coding** | 6 min 25 sec | 45/ 75 | ✓ |

**QUESTION 1**

Correct Answer

Score 45

## Pairs > Coding

Search | Algorithms | Medium | problem-solving | Core CS

QUESTION DESCRIPTION

Given an array of integers and a target value, determine the number of pairs of array elements that have a difference equal to the target value.

**Example**

$k = 1$

$arr = [1, 2, 3, 4]$

There are three values that differ by $k = 1$: $2 - 1 = 1$, $3 - 2 = 1$, and $4 - 3 = 1$. Return $3$.

**Function Description**

Complete the *pairs* function below.

pairs has the following parameter(s):

- *int k:* an integer, the target difference

- *int arr[n]:* an array of integers

**Returns**

- *int:* the number of pairs that satisfy the criterion

**Input Format**

The first line contains two space-separated integers $n$ and $k$, the size of $arr$ and the target value.
The second line contains $n$ space-separated integers of the array $arr$.

**Constraints**

- $2 \leq n \leq 10^5$
- $0 < k < 10^9$
- $0 < arr[i] < 2^{31} - 1$
- each integer $arr[i]$ will be unique

**Sample Input**

```
STDIN       Function
-----       --------
5 2         arr[] size n = 5, k =2
1 5 3 4 2   arr = [1, 5, 3, 4, 2]
```

**Sample Output**

```
3
```

**Explanation**

There are 3 pairs of integers in the set with a difference of 2: [5,3], [4,2] and [3,1]. .

**CANDIDATE ANSWER**

Language used: **Python 3**

```python

#
# Complete the 'pairs' function below.
#
# The function is expected to return an INTEGER.
# The function accepts following parameters:
#  1. INTEGER k
#  2. INTEGER_ARRAY arr
#

def pairs(k, arr):
    # Write your code here
    pair_list = []
    for i in range(len(arr)):
        for j in range(len(arr)):
            if i == j:
                continue
            if arr[i] - arr[j] == k:
                # print(f"{arr[i]} - {arr[j]} == {k} --> append")
                pair_list.append([arr[i],arr[j]])
    return(len(pair_list))


```

| TESTCASE | DIFFICULTY | TYPE | STATUS | SCORE | TIME TAKEN | MEMORY USED |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Testcase 1 | Easy | Hidden case | Success | 5 | 0.0553 sec | 9.42 KB |
| Testcase 2 | Easy | Hidden case | Success | 5 | 0.0787 sec | 9.52 KB |
| Testcase 3 | Easy | Hidden case | Success | 5 | 0.0854 sec | 9.35 KB |
| Testcase 4 | Easy | Hidden case | Success | 5 | 0.0493 sec | 9.29 KB |
| Testcase 5 | Easy | Hidden case | Success | 5 | 0.1624 sec | 9.5 KB |
| Testcase 6 | Easy | Hidden case | Success | 5 | 4.9849 sec | 10 KB |
| Testcase 7 | Easy | Hidden case | Success | 5 | 5.8749 sec | 10 KB |
| Testcase 8 | Easy | Hidden case | Success | 5 | 1.4057 sec | 9.68 KB |
| Testcase 9 | Easy | Hidden case | Success | 5 | 4.2042 sec | 9.71 KB |
| Testcase 10 | Easy | Hidden case | Terminated due to timeout | 0 | 10.0026 sec | 10.6 KB |
| Testcase 11 | Easy | Hidden case | Terminated due to timeout | 0 | 10.0061 sec | 20.8 KB |
| Testcase 12 | Easy | Hidden case | Terminated due to timeout | 0 | 10.0044 sec | 20.8 KB |
| Testcase 13 | Easy | Hidden case | Terminated due to timeout | 0 | 10.0029 sec | 20.8 KB |
| Testcase 14 | Easy | Hidden case | Terminated due to timeout | 0 | 10.0051 sec | 20.7 KB |
| Testcase 15 | Easy | Hidden case | Terminated due to timeout | 0 | 10.003 sec | 20.8 KB |
| Testcase 16 | Easy | Sample case | Success | 0 | 0.0473 sec | 9.44 KB |
| Testcase 17 | Easy | Sample case | Success | 0 | 0.0393 sec | 9.39 KB |
| Testcase 18 | Easy | Sample case | Success | 0 | 0.0348 sec | 9.45 KB |

No Comments

**PDF generated at: 30 Oct 2021 01:20:23 UTC**