Your Divisible Sum Pairs submission got 10.00 points. Share Tweet

You are 64.91 points away from the 3rd star for problem solving badge.

Try the Next Challenge | Try a Random Challenge

Divisible Sum Pairs

by wanbo

Problem Submissions Leaderboard Discussions Editorial

You are given an array of n integers, $a_0, a_1, \ldots, a_{n-1}$, and a positive integer, k. Find and print the number of (i, j) pairs where $i < j$ and $a_i + a_j$ is divisible by k.

Input Format

The first line contains 2 space-separated integers, n and k.
The second line contains n space-separated integers describing the values of $ar[a_0, a_1, \ldots, a_{n-1}]$.

Constraints

- $2 \leq n \leq 100$
- $1 \leq k \leq 100$
- $1 \leq a_i \leq 100$

Output Format

Print the number of (i, j) pairs where $i < j$ and $a_i + a_j$ is evenly divisible by k.

Sample Input

```
6 3
1 3 2 6 1 2
```

Sample Output

```
5
```

Explanation

Here are the 5 valid pairs when $k = 3$:

- $(0, 2) \rightarrow a_0 + a_2 = 1 + 2 = 3$
- $(0, 5) \rightarrow a_0 + a_5 = 1 + 2 = 3$

- $(1, 3) \rightarrow a_1 + a_3 = 3 + 6 = 9$
- $(2, 4) \rightarrow a_2 + a_4 = 2 + 1 = 3$
- $(4, 5) \rightarrow a_4 + a_5 = 1 + 2 = 3$

Easy Submitted 101672 times
Max Score 10

Need Help?

View Discussions

View Editorial Solution

View Top Submissions

Rate This Challenge:

Download problem statement

Download sample test cases

Suggest Edits

Current Buffer (saved locally, editable) Java 8

```
import java.io.*;
import java.util.*;
import java.text.*;
import java.math.*;
import java.util.regex.*;

public class Solution {

    static int divisibleSumPairs(int n, int k, int[] ar) {
        // Complete this function
        int result = 0;
        for (int i = 0; i < ar.length; i++) {
            for (int j = i+1; j < ar.length; j++) {
                if ((ar[i] + ar[j])%k == 0) {
                    result++;
                }
            }
        }

        return result;
    }

    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int n = in.nextInt();
        int k = in.nextInt();
```

```
        int[] ar = new int[n];
        for(int ar_i = 0; ar_i < n; ar_i++){
            ar[ar_i] = in.nextInt();
        }
        int result = divisibleSumPairs(n, k, ar);
        System.out.println(result);
    }
}

```

Line: 20 Col: 23

Upload Code as File | Test against custom input | Run Code | Submit Code

Congrats, you solved this challenge!

Challenge your friends:

- ✔ 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
- ✔ Test Case #17
- ✔ Test Case #18
- ✔ Test Case #19

Next Challenge

You've earned 10.00 points. You are now 64.91 points away from the 3rd star for your Problem Solving badge.