

Problem

Given an array of integers and a positive integer k , determine the number of (i, j) pairs where $i < j$ and $ar[i] + ar[j]$ is divisible by k .

Example

$ar = [1, 2, 3, 4, 5, 6]$

$k = 5$

Three pairs meet the criteria: $[1, 4]$, $[2, 3]$, and $[4, 6]$.

Submissions

Function Description

Complete the divisibleSumPairs function in the editor below.

divisibleSumPairs has the following parameter(s):

- int n: the length of array ar
- int ar[n]: an array of integers
- int k: the integer divisor

Leaderboard

Returns

- int: the number of pairs

Input Format

The first line contains 2 space-separated integers, n and k .

The second line contains n space-separated integers, each a value of $arr[i]$.

- Discussions
- Constraints**
- $2 \leq n \leq 100$
 - $1 \leq k \leq 100$
 - $1 \leq ar[i] \leq 100$

Sample Input

STDIN	Function
-----	-----
6 3	n = 6, k = 3
1 3 2 6 1 2	ar = [1, 3, 2, 6, 1, 2]

Editorial

Sample Output

5

Change Theme

Language

C++11

```
1  #include <bits/stdc++.h>
2
3  using namespace std;
4
5  string ltrim(const string&);
6  string rtrim(const string&);
7  vector<string> split(string s, string delimiter);
8
9  /*
10   * Complete the 'divisibleSumPairs' function below.
11   *
12   * The function is expected to return an integer.
13   * The function accepts the following parameters:
14   * 1. INTEGER n
15   * 2. INTEGER k
16   * 3. INTEGER_ARRAY ar
17   */
18
19
20 int divisibleSumPairs(int n, int k, vector<int> ar) {
21     sort(ar.begin(), ar.end());
22     int count=0;
23     for(int i=0;i<n;i++)
24     {
25         for(int j=i+1;j<n;j++)
26         {
27             if((ar[i]+ar[j])%k==0)
28             {
29                 count++;
30             }
31         }
32     }
33     return count;
34 }
35
36
37 int main()
38 {
39     ofstream fout(getenv("OUTPUT_PATH"));
40
41     string first_multiple_input;
42     getline(cin, first_multiple_input);
```