

Divisible Sum Pairs

HackerRank

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 $[4, 6]$.

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

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 $arr[i]$.

Constraints

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

Sample Input

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

Sample Output

5

Explanation

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

- $(0, 2) \rightarrow ar[0] + ar[2] = 1 + 2 = 3$
- $(0, 5) \rightarrow ar[0] + ar[5] = 1 + 2 = 3$
- $(1, 3) \rightarrow ar[1] + ar[3] = 3 + 6 = 9$
- $(2, 4) \rightarrow ar[2] + ar[4] = 2 + 1 = 3$
- $(4, 5) \rightarrow ar[4] + ar[5] = 1 + 2 = 3$