Divisible Sum Pairs ★

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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
-----       --------
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 $k = 3$:

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

Change Theme Language Java 8

```
9   import java.util.stream.*;
10  import static java.util.stream.Collectors.joining;
11  import static java.util.stream.Collectors.toList;
12
13  class Result {
14
15      /*
16       * Complete the 'divisibleSumPairs' function below.
17       *
18       * The function is expected to return an INTEGER.
19       * The function accepts following parameters:
20       *  1. INTEGER n
21       *  2. INTEGER k
22       *  3. INTEGER_ARRAY ar
23       */
24
25      public static int divisibleSumPairs(int n, int k, List<Integer> ar) {
26      // Write your code here
27          int ans=0;
28
29          for(int i=0; i<ar.size(); i++){
30              for(int j=i+1; j<ar.size(); j++){
31                  if((ar.get(i) + ar.get(j))%k==0){
32                      ans++;
33                  }
34              }
35          }
36          return ans;
37      }
38
39  }
40
41  public class Solution {
42      public static void main(String[] args) throws IOException {
43          BufferedReader bufferedReader = new BufferedReader(new InputStreamReader
    (System.in));
```

Line: 65 Col: 1

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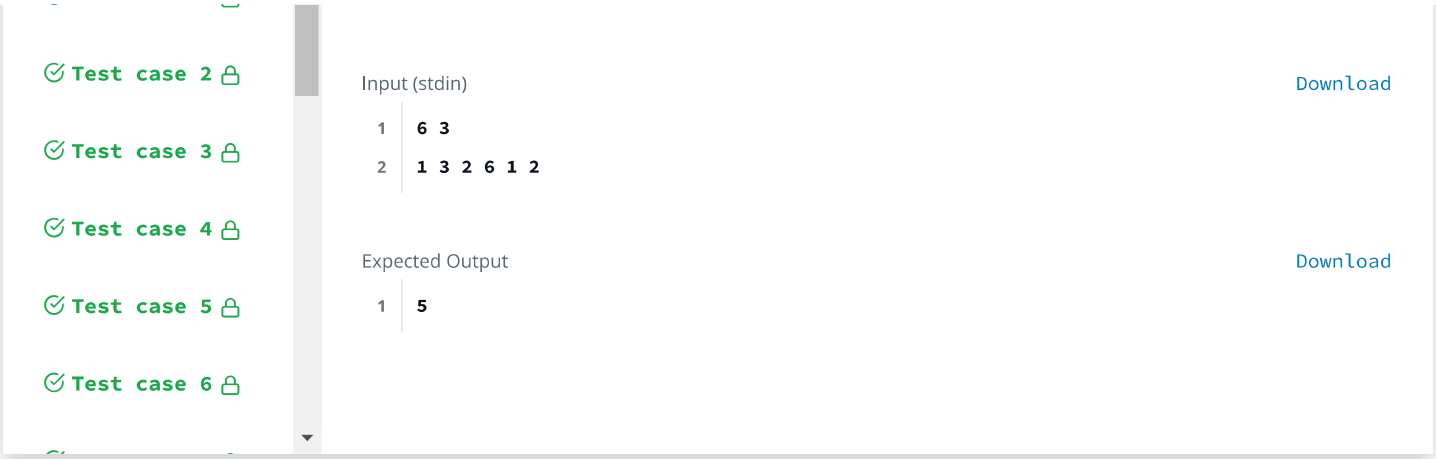
Test case 0

Test case 1

Compiler Message

Success


Test case 2
Test case 3
Test case 4
Test case 5
Test case 6
Input (stdin)
Download
1 6 3
2 1 3 2 6 1 2
Expected Output
Download
1 5