# Problem 6 (Hard): Mixing up Cat Food

Time Limit: 1s

Jacob feels like his cat shouldn't only each 1 type of food. He wants to mix up the food a bit. He can buy N cat food bags, each has  $G_i$  grams of food. However, after some number of days, Jacob doesn't want leftover food. Given that Jacob's cat eats K grams of food a day, find the number of pair of bags  $(G_i, G_j)$  such that i < j and  $G_i + G_j$  is divisible by K?

#### **Constraints**

Note the constraints are different from the original problem and you may need fast input for this problem.

```
2 \le N \le 10^6

1 \le K \le 10^9

1 \le G_i \le 10^9
```

## **Input Specification**

The first line will contain 2 space separated integers N and K. The next line will contain N space separated integers  $G_i$ .

### **Output Specification**

Output the number of pairs of numbers  $(G_i, G_j)$  such that i < j and  $G_i + G_j$  is divisible by K.

#### Sample Input

```
6 5
1 2 4 3 5 7
```

# **Sample Output**

### **Explanation**

The pairs are (1,4),(2,3),(3,7).