

## 11087 Divisibility Testing

You will be given a list of  $n$  integers,  $\langle a_1 a_2 a_3 \dots a_n \rangle$  and an integer  $k$ . Find out the number of ways of choosing 2 integers  $(a_i, a_j)$ , such that  $a_i \leq a_j$  and  $1 \leq i, j \leq n$  and  $i \neq j$  and  $(a_i + a_j)$  is divisible by  $k$ . Every pair must be distinct. Two pairs,  $(a, b)$  and  $(c, d)$ , are equal if  $a$  is equal to  $c$  and  $b$  is equal to  $d$ .

Suppose we are given 5 integers  $\langle 41223 \rangle$  and  $k = 1$ . There are 7 ways of choosing different pairs that meets the above restrictions:  $(1, 2)(1, 3)(1, 4)(2, 2)(2, 3)(2, 4)(3, 4)$ .

### Input

The first line of input contains an integer  $T$  that determines the number of test cases. Each test case contains two lines. The first line consists of two integers  $n$  and  $k$ . The next line contains  $n$  integers. The  $i$ -th integer gives the value of  $a_i$ .

### Output

For each test case, output the case number followed by the number of ways to choose the pairs.

### Constraints

- $T < 100$
- $1 < n < 100001$
- $0 < k < 501$
- $|a_i| < 10000001$  for any  $i$

### Sample Input

```
2
5 1
4 1 2 2 3
5 2
4 1 2 2 3
```

### Sample Output

```
Case 1: 7
Case 2: 3
```