Consecutive Subsequences

Jigar got a sequence of \mathbf{n} positive integers as his birthday present! He likes consecutive subsequences whose sum is divisible by \mathbf{k} . He asks you to write a program to count them for him.

Input Format

The first line contains **T**, the number of testcases.

T testcases follow. Each testcase consists of 2 lines.

The first line contains \mathbf{n} and \mathbf{k} separated by a single space.

And the second line contains **n** space separated integers.

Output Format

For each test case, output the number of consecutive subsequenences whose sum is divisible by \mathbf{k} in a newline.

Constraints

```
1 \le T \le 20
```

 $1 \le n \le 10^6$

 $1 \le k \le 100$

 $1 \le a[i] \le 10^4$

Sample Input

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

Sample Output

```
4
9
```

Explanation

For

```
1 2 3 4 1
```

there exists, 4 subsequences whose sum is divisible by 3, they are

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

For

```
1 2 1 2 1 2
```

there exists, 9 subsequences whose sum is divisible by 2, they are

