

Consecutive Subsequences

Jigar got a sequence of **n** positive integers as his birthday present! He likes consecutive subsequences whose sum is divisible by **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 **n** and **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 subsequences whose sum is divisible by **k** in a newline.

Constraints

- $1 \leq T \leq 20$
- $1 \leq n \leq 10^6$
- $1 \leq k \leq 100$
- $1 \leq a[i] \leq 10^4$

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

2
2
2
1 2 1
1 2 1
1 2 1 2
2 1 2 1
1 2 1 2
2 1 2 1 2