Macarons

This question is graded for 1%.

Problem Statement

The local bakery has a new item on the menu: numbered macarons. Every macaron has a random number printed on the top half. The macarons are packaged in boxes, where they are arranged side by side.

Tom has bought a box of numbered macarons from the bakery. As a math enthusiast, he is only interested in eating contiguous subsequences of macarons where the sum of the numbers of the macaron is divisible by a divisor *d*. Can you help Tom to count all possible subsequences fulfilling this criterion?

Input

The first line of input contains two space separated integers *n* (1 <= n <= 50000), the number of macarons in the box and *d* (1 <= d <= 1000000). The following line contains *n* space separated integers where each integer is between 1 and 10^9 inclusive, and each integer represents the number on each macaron.

Output

Output a single integer, which is the number of contiguous subsequences of macarons with a number sum divisible by *d*.

Sample Input 1

```
4 10
1 2 3 3
```

Sample Output 1

```
0
```

Sample Input 2

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

Sample Output 2

```
2
```

Explanation

For Sample Input 1, no subsequences have a sum divisible by 10. For Sample Input 2, there are two possible subsequences with a sum divisible by 4: (2,1,2,1,2) and (1,2,1).