

Olympic

This year N people (contestants, coaches and guests), that represent universities from participating countries, will go on the streets, trying

to impress spectators by original costumes and loud songs. Each university is represented by a group of people and has a unique identifier (ID) that is carried by each person in the group. To make the parade well organised and entertaining, each group should be lined up in several rows, each consisting of K people.

Only one university was not able to line up according to the mentioned rule, and you need to find it's ID.

Input

The first line at input contains integer N and K , separated by a single space ($1 \leq N \leq 1\,000\,000$, $2 \leq K \leq 10^9$). Following N lines contain IDs C_1, C_2, \dots, C_n ($0 \leq C_i \leq 1\,000\,000\,000$, $1 \leq i \leq N$) of N

people.

Output

The single line at output should contain one integer – the answer for the problem.

Example

Input:

10 3

1

1

2

3

1

3

3

2

2

2

Output:

2