

Problem E. Endless Sum

Source file name: E.c, E.cpp, E.java

Input: Standard Output: Standard

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You are given a list of N positive integer numbers and then proceed to sum each of them in the order the numbers were given, once you reach the end of the list you will go to the first number and proceed to sum the numbers again.

At each step after you sum each number you will have a total sum S, can you determine if at any point the sum S will be a multiple of the number K?

Input

The first line of input contains a number T, the number of test cases. Followed by T test cases, each test case contains in the first line the numbers N and K separated by a space, followed by a line with N numbers separated by a space, the list you will take to sum the numbers.

- $2 \le T \le 100$
- $1 \le N < 10^5$
- $1 < K < 10^9$
- Each number A_i will be in the range : $1 \le A_i \le 100$

Output

For each test case you must print a line with the string "Yes." if in some point the sum will be a multiple of K, print "No." otherwise.

Example

Input	Output
3	Yes.
1 5	Yes.
1	
3 11	
3 11 1 5 10	

Explanation

In the first case, after the first number is summed 5 times you will get a multiple of 5.

For the second case, Once you summed all the numbers your total sum is 16, you sum the first number again and the total sum is 17, next you sum the second number and the total sum is 22 which is a multiple of 11.