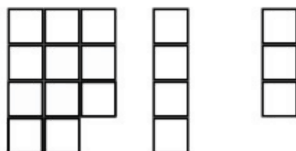


Remainders

Problem ID: remainders

Given integers n and m , determine whether there exists some positive integer x such that $n^x \bmod m = 0$.
NOTE: \bmod is the modulo ($\%$ operation in most programming languages).

Modulo operation



$$11 \bmod 4 = 3$$

Input

- The first and only line will contain two integers, n and m .

Constraints

- $0 \leq n < 10^9$
- $0 < m \leq 10^6$

Output

- A single word, "YES" if there exists an x such that $n^x \bmod m = 0$.
- Otherwise output the word "NO".

Sample Input 1

2 8

Sample Output 1

YES

Sample Input 2

8 5

Sample Output 2

NO