Title: Arcane Numbers 1

Vance and Shackler like playing games. One day, they are playing a game called "arcane numbers". The game is pretty simple, Vance writes down a finite decimal under base A, and then Shackler translates it under base B. If Shackler can translate it into a finite decimal, he wins, else it will be Vance’s win. Now given A and B, please help Vance to determine whether he will win or not. Note that they are playing this game using a mystery language so that A and B may be up to 10^12

## Input

The first line contains a single integer T, the number of test cases.

For each case, there’s a single line contains A and B。

## Output

For each case, output “YES” if Vance will win the game. Otherwise, print “NO”. See Sample Output for more details.

## Sample Input

3

5 5

2 3

1000 2000

## Sample Output

Case #1: YES

Case #2: NO

Case #3: YES

## Source

Vance and Shackler