

B. Modular Equations

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Last week, Hamed learned about a new type of equations in his math class called Modular Equations. Lets define i modulo j as the remainder of division of i by j and denote it by $i \bmod j$. A Modular Equation, as Hamed's teacher described, is an equation of the form $a \bmod x = b$ in which a and b are two non-negative integers and x is a variable. We call a positive integer x for which a solution of our equation.

Hamed didn't pay much attention to the class since he was watching a movie. He only managed to understand the definitions of these equations.

Now he wants to write his math exercises but since he has no idea how to do that, he asked you for help. He has told you all he knows about Modular Equations and asked you to write a program which given two numbers a and b determines how many answers the Modular Equation has.

Input

In the only line of the input two space-separated integers a and b ($0 \leq a, b \leq 10^9$) are given.

Output

If there is an infinite number of answers to our equation, print "infinity" (without the quotes). Otherwise print the number of solutions of the Modular Equation .

Examples

| |
|---------------|
| input |
| 21 5 |
| output |
| 2 |
| input |
| 9435152 272 |
| output |
| 282 |
| input |
| 10 10 |
| output |
| infinity |

Note

In the first sample the answers of the Modular Equation are 8 and 16 since