

## A. I Wanna Be the Guy

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

There is a game called "I Wanna Be the Guy", consisting of  $n$  levels. Little X and his friend Little Y are addicted to the game. Each of them wants to pass the whole game.

Little X can pass only  $p$  levels of the game. And Little Y can pass only  $q$  levels of the game. You are given the indices of levels Little X can pass and the indices of levels Little Y can pass. Will Little X and Little Y pass the whole game, if they cooperate each other?

### Input

The first line contains a single integer  $n$  ( $1 \leq n \leq 100$ ).

The next line contains an integer  $p$  ( $0 \leq p \leq n$ ) at first, then follows  $p$  distinct integers  $a_1, a_2, \dots, a_p$  ( $1 \leq a_i \leq n$ ). These integers denote the indices of levels Little X can pass. The next line contains the levels Little Y can pass in the same format. It's assumed that levels are numbered from 1 to  $n$ .

### Output

If they can pass all the levels, print "I become the guy.". If it's impossible, print "Oh, my keyboard!" (without the quotes).

### Examples

input
4 3 1 2 3 2 2 4
output
I become the guy.

input
4 3 1 2 3 2 2 3
output
Oh, my keyboard!

### Note

In the first sample, Little X can pass levels [1 2 3], and Little Y can pass level [2 4], so they can pass all the levels both.

In the second sample, no one can pass level 4.