Task

You are playing a game involving **dominos** with your local pizza store. The bag contains **55** unique dominos of the form **(x, y)**, where **0 ≤ x, y < 10**. Dominos may be flipped around. The game is as follows: you and the pizza store alternate placing down dominos. If the most recently placed domino was **(x, y)**, the next player must place a domino of the form **(y, z)**. If a player cannot place a domino down on their turn, they lose that round. You win if the computer is unable to place down a domino.

Interaction Details:

At the start of the game, **1 ≤ n ≤ 27** dominos will be taken out of the bag. The domino **(0, 0)** is already placed down. The grader will print the number of dominos, and then the game will begin. Dominos will be represented by a space separated pair of integers. On the first turn, the grader may output **"0 0"**, which indicates that you should start the game.

There will be **6** trials. If you win a game, the grader will output **"you win"**, and the game will restart with new dominos.

The time limit is **2 minutes**.

Sample Interaction:

3
0 1
1 2
2 0

0 1
1 2
2 0
0 1
Bad Input