# A Chessboard Game

# HackerRank

Two players are playing a game on a 15 imes15 chessboard. The rules of the game are as follows:

- The game starts with a single coin located at some x, y coordinates. The coordinates of the upper left cell are (1, 1), and of the lower right cell are (15, 15).
- In each move, a player must move the coin from cell (x,y) to one of the following locations:

1. 
$$(x-2, y+1)$$

- 2. (x-2, y-1)
- 3. (x+1, y-2)
- 4. (x-1, y-2)

**Note:** The coin must remain inside the confines of the board.

• Beginning with player 1, the players alternate turns. The first player who is unable to make a move loses the game.

The figure below shows all four possible moves using an  $8 \times 8$  board for illustration:



Given the initial coordinates of the players' coins, assuming optimal play, determine which player will win the game.

# **Function Description**

Complete the *chessboardGame* function in the editor below. It should return a string, either First or Second.

chessboardGame has the following parameter(s):

• x: an integer that represents the starting column position

• *y*: an integer that represents the starting row position

# **Input Format**

The first line contains an integer t, the number of test cases. Each of the next t lines contains 2 space-separated integers x and y.

# Constraints

- $1 \le t \le 225$
- $1 \leq x[i], y[i] \leq 15$

# **Output Format**

On a new line for each test case, print **First** if the first player is the winner. Otherwise, print **Second**.

# Sample Input

# Sample Output

Second First First

# Explanation

In the first case, player1 starts at the red square and can move to any of the blue squares. Regardless of which one is chosen, the player 2 can move to one of the green squares to win the game.



In the second case, player 1 starts at the red square and can move to any of the blue squares or the purple one. Moving to the purple one limits player 2 to the yellow square. From the yellow square, player 1 moves to the green square and wins.

