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Chessboard Game, Again! 🔖

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

- The game starts with k coins located at one or more (x, y) coordinates on the board (a single cell may contain more than one coin). The coordinate of the upper left cell is $(1, 1)$, and the coordinate of the lower right cell is $(15, 15)$.

- In each move, a player must move a single coin from some 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.

- The players move in alternating turns. The first player who is unable to make a move loses the game.

The figure below shows all four possible moves:

(1,1)

(8,8)
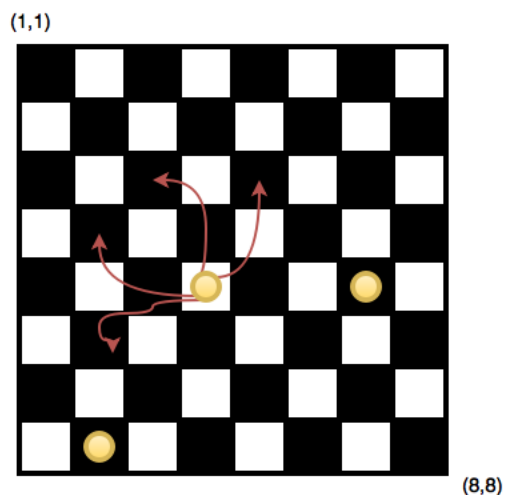
Note: While the figure shows a 8×8 board, this game is played on a 15×15 board.

Given the value of k and the initial coordinate(s) of k coins, determine which player will win the game. Assume both players always move optimally.

Input Format

The first line contains an integer, T, denoting the number of test cases.
Each test case is defined as follows over the subsequent lines:

1. The first line contains an integer, k, denoting the number of coins on the board.

2. Each line i (where $0 \leq i < k$) of the k subsequent lines contains 2 space-separated integers describing the respective values of x_i and y_i of the coordinate where coin k_i is located.

Note: Recall that a cell can have more than one coin (i.e., any cell can have 0 to k coins in it at any given time).

Constraints

- $1 \leq T \leq 1000$

- $1 \leq k \leq 1000$

- $1 \leq x_i, y_i \leq 15$, where $0 \leq i < k$.

Output Format

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

Sample Input

```
2
3
5 4
5 8
8 2
6
7 1
7 2
7 3
7 4
7 4
7 4
```

Sample Output

```
First
Second
```

Submissions: 527
Max Score: 30
Difficulty: Medium

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More

Current Buffer (saved locally, editable)   Java 7

```java
1  import java.io.*;
2  import java.util.*;
3  import java.text.*;
4  import java.math.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
11     }
12 }
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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