# Rectangular Game

**Problem Statement**

You are given an infinite 2-d grid with the bottom left cell referenced as (1,1). All the cells contain a value of zero initially. Let's play a game?

The game consists of **N** steps wherein each step you are given two integers **a** and **b**. The value of each of the cells in the co-ordinate (u, v) satisfying $1 \leq u \leq a$ and $1 \leq v \leq b$, is increased by 1. After **N** such steps, if **X** is the largest number amongst all the cells in the rectangular board, can you print the number of **X**'s in the board?

**Input Format**
The first line of input contains a single integer N. N lines follow.
Each line contains two integers a and b separated by a single space.

**Output Format**
Output a single integer - the number of X's.

**Constraints**
$1 \leq N \leq 100$
$1 \leq a \leq 10^6$
$1 \leq b \leq 10^6$

**Sample Input**

```
3
2 3
3 7
4 1
```

**Sample Output**

```
2
```

**Explanation**

Assume that the following board corresponds to cells (i, j) where $1 \leq i \leq 4$ and $1 \leq j \leq 7$.

At the beginning board is in the following state:

```
0 0 0 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 0 0 0
0 0 0 0 0 0 0
```

After the first step we will obtain:

```
0 0 0 0 0 0 0
0 0 0 0 0 0 0
1 1 1 0 0 0 0
1 1 1 0 0 0 0
```

After the second step we will obtain:

```
0 0 0 0 0 0 0
1 1 1 1 1 1 1
2 2 2 1 1 1 1
2 2 2 1 1 1 1
```

Finally, after the last step we will obtain:

```
1 0 0 0 0 0 0
2 1 1 1 1 1 1
3 2 2 1 1 1 1
3 2 2 1 1 1 1
```

So, the maximum number is 3 and there are exactly two cells which correspond to 3. Hence 2.