

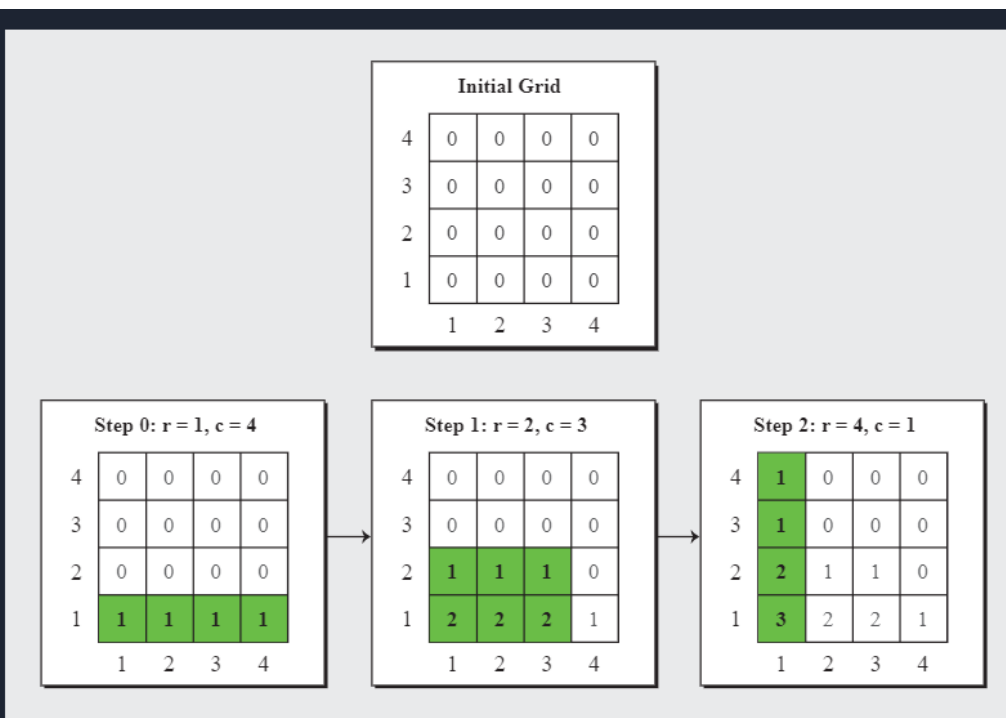
## 1. Growth in 2 Dimensions

Start with an infinite two dimensional grid filled with zeros, indexed from  $(1,1)$  at the bottom left corner with coordinates increasing toward the top and right. Given a series of coordinates  $(r, c)$ , where  $r$  is the ending row and  $c$  is the ending column, add 1 to each element in the range from  $(1,1)$  to  $(r, c)$  inclusive. Once all coordinates are processed, determine how many cells contain the maximal value in the grid.

### Example

*upRight* = ["1 4", "2 3", "4 1"]

The two space-separated integers within each string represent  $r$  and  $c$  respectively. The following diagrams show each iteration starting at zero. The maximal value in the grid is 3, and there is 1 occurrence at cell  $(1, 1)$ .



### Function Description

Complete the function *countMax* in the editor below.

*countMax* has the following parameter(s):

*string upRight[n]*: an array of strings made of two space-separated integers, *r* and *c*.

### Return

*long*: the number of occurrences of the final grid's maximal element

### Constraints

- $1 \leq n \leq 100$
- $1 \leq \text{number of rows, number of columns} \leq 10^6$

### ▼ Input Format for Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer *n*, the size of the array *upRight*.

Each of the next *n* lines contains a string of two space-separated integers representing coordinates *r* and *c* for element *upRight[i]*.

### ▼ Sample Case 0

#### Sample Input

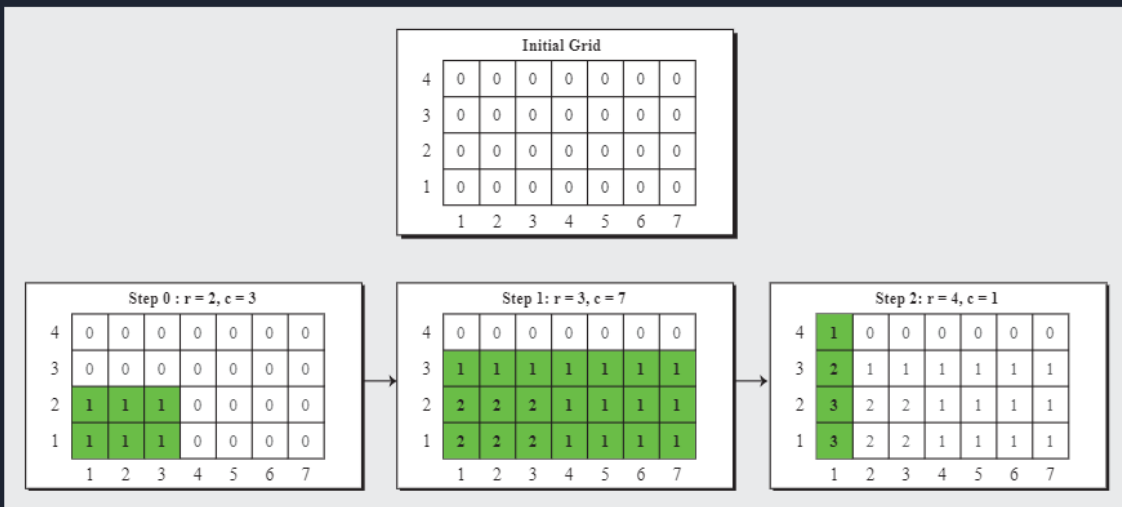
STDIN	Function
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3 →	upRight[] size n = 3
2 3 →	upRight = ['2 3', '3 7', '4 1']
3 7	
4 1	

#### Sample Output

2

## Explanation

Given  $upRight = ["2\ 3", "3\ 7", "4\ 1"]$ :



The portion of the infinite grid corresponding to cells  $(r, c)$  where  $1 \leq r \leq 4$  and  $1 \leq c \leq 7$

After processing all  $n = 3$  coordinate pairs, the maximum value in any cell is 3. Because there are two such cells with this maximal value, return 2 as the answer.