Day 24

5741. Maximum Building Height

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You want to build n new buildings in a city. The new buildings will be built in a line and are labeled from 1 to n.

However, there are city restrictions on the heights of the new buildings:

- The height of each building must be a non-negative integer.
- The height of the first building **must** be 0.
- The height difference between any two adjacent buildings **cannot exceed** 1.

Additionally, there are city restrictions on the maximum height of specific buildings. These restrictions are given as a 2D integer array `restrictions` where `restrictions[i] = [id_i, maxHeight_i]` indicates that building id_i must have a height **less than or equal to** `maxHeight_i`.

It is guaranteed that each building will appear **at most once** in `restrictions`, and building 1 will **not** be in `restrictions`.

Return the **maximum possible height** of the **tallest** building.

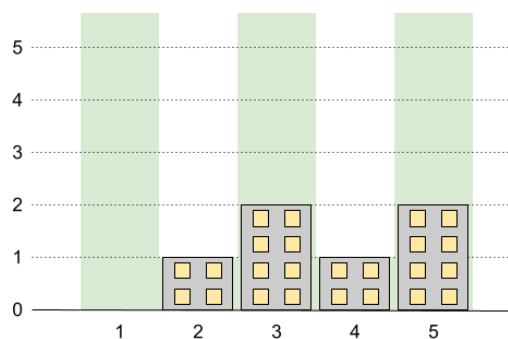|	
User Accepted:	0
User Tried:	2
Total Accepted:	0
Total Submissions:	2
Difficulty:	Hard

Example 1:


```
Input: n = 5, restrictions = [[2,1],[4,1]]
Output: 2
Explanation: The green area in the image indicates the maximum allowed height for each building.
We can build the buildings with heights [0,1,2,1,2], and the tallest building has a height of 2.
```
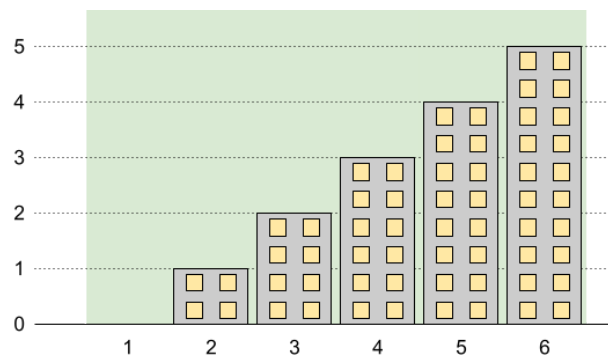
Example 2:


```
Input: n = 6, restrictions = []
Output: 5
Explanation: The green area in the image indicates the maximum allowed height for each building.
We can build the buildings with heights [0,1,2,3,4,5], and the tallest building has a height of 5.
```
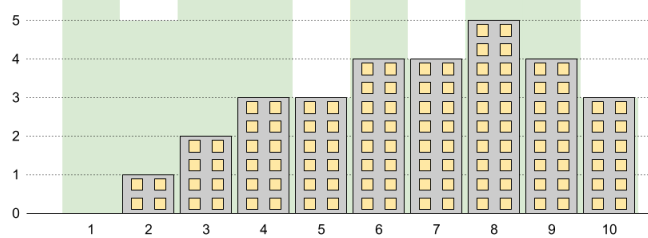
Example 3:

```
Input: n = 10, restrictions = [[5,3],[2,5],[7,4],[10,3]]
Output: 5
Explanation: The green area in the image indicates the maximum allowed height for each building.
We can build the buildings with heights [0,1,2,3,3,4,4,5,4,3], and the tallest building has a height of 5.
```

Constraints:

- $2 <= n <= 10^9$
- $0 <= restrictions.length <= min(n - 1, 10^5)$
- $2 <= id_i <= n$
- id_i is **unique**.
- $0 <= maxHeight_i <= 10^9$

JavaScript ▾

```javascript
/**
 * @param {number} n
 * @param {number[][]} restrictions
 * @return {number}
 */
var maxBuilding = function(n, restrictions) {

};
```

☐ **Custom Testcase**   (Use Example Testcases)

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