6178. Divide Intervals Into Minimum Number of Groups

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You are given a 2D integer array `intervals` where `intervals[i] = [left`$_i$`, right`$_i$`]` represents the **inclusive** interval `[left`$_i$`, right`$_i$`]`.

You have to divide the intervals into one or more **groups** such that each interval is in **exactly** one group, and no two intervals that are in the same group **intersect** each other.

Return *the **minimum** number of groups you need to make*.

Two intervals **intersect** if there is at least one common number between them. For example, the intervals `[1, 5]` and `[5, 8]` intersect.

User Accepted:	74
User Tried:	87
Total Accepted:	74
Total Submissions:	91
Difficulty:	Medium

Example 1:

```
Input: intervals = [[5,10],[6,8],[1,5],[2,3],[1,10]]
Output: 3
Explanation: We can divide the intervals into the following groups:
- Group 1: [1, 5], [6, 8].
- Group 2: [2, 3], [5, 10].
- Group 3: [1, 10].
It can be proven that it is not possible to divide the intervals into fewer than 3 groups.
```

Example 2:

```
Input: intervals = [[1,3],[5,6],[8,10],[11,13]]
Output: 1
Explanation: None of the intervals overlap, so we can put all of them in one group.
```

Constraints:

- `1 <= intervals.length <= 10`^{5}
- `intervals[i].length == 2`
- `1 <= left`$_i$ `<= right`$_i$ `<= 10`^{6}

JavaScript

```javascript
const minGroups = (a) => sweepLineIntervals(a)

const sweepLineIntervals = (a) => {
    let d = [], h = 0, res = 0;
    for (const [l, r] of a) {
        d.push([l, 1]);
        d.push([r + 1, -1]);
    }
    d.sort((x, y) => {
        if (x[0] != y[0]) return x[0] - y[0];
        return x[1] - y[1];
    });
    for (const [, mark] of d) {
        h += mark;
        res = Math.max(res, h);
    }
    return res;
};
```

Custom Testcase | Use Example Testcases

Run | Submit

Submission Result: Accepted (/submissions/detail/796829556/) | More Details > (/submissions/detail/796829556/)

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