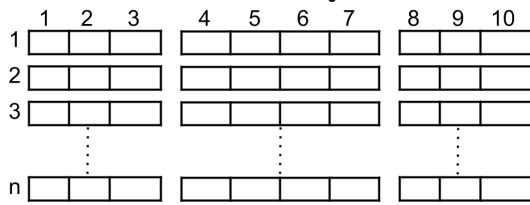# 1386. Cinema Seat Allocation
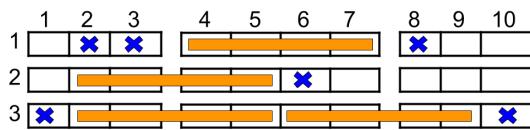
Solved ●

Medium   🏷 Topics   🔒   💡 Hint

A cinema has `n` rows of seats, numbered from 1 to `n` and there are ten seats in each row, labelled from 1 to 10 as shown in the figure above.

Given the array `reservedSeats` containing the numbers of seats already reserved, for example, `reservedSeats[i] = [3,8]` means the seat located in row **3** and labelled with **8** is already reserved.

Return the maximum number of four-person groups you can assign on the cinema seats. A four-person group occupies four adjacent seats **in one single row**. Seats across an aisle (such as [3,3] and [3,4]) are not considered to be adjacent, but there is an exceptional case on which an aisle split a four-person group, in that case, the aisle split a four-person group in the middle, which means to have two people on each side.

Example 1:

Input: n = 3, reservedSeats = [[1,2],[1,3],[1,8],[2,6],[3,1],[3,10]]
Output: 4
Explanation: The figure above shows the optimal allocation for four groups, where seats mark with blue are already reserved and contiguous seats mark with orange are for one group.

Example 2:

Input: n = 2, reservedSeats = [[2,1],[1,8],[2,6]]
Output: 2

Example 3:

Input: n = 4, reservedSeats = [[4,3],[1,4],[4,6],[1,7]]
Output: 4

Constraints:

- `1 <= n <= 10^9`
- `1 <= reservedSeats.length <= min(10*n, 10^4)`
- `reservedSeats[i].length == 2`
- `1 <= reservedSeats[i][0] <= n`
- `1 <= reservedSeats[i][1] <= 10`
- All `reservedSeats[i]` are distinct.

Seen this question in a real interview before?   1/5

Yes   No

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Topics   ⌄

🔒   ⌄

Hint 1   ⌄

Hint 2   ⌄

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