

1847. Closest Room

Description

There is a hotel with `n` rooms. The rooms are represented by a 2D integer array `rooms` where `rooms[i] = [roomIdi, sizei]` denotes that there is a room with room number `roomIdi` and size equal to `sizei`. Each `roomIdi` is guaranteed to be **unique**.

You are also given `k` queries in a 2D array `queries` where `queries[j] = [preferredj, minSizej]`. The answer to the `jth` query is the room number `id` of a room such that:

- The room has a size of **at least** `minSizej`, and
- `abs(id - preferredj)` is **minimized**, where `abs(x)` is the absolute value of `x`.

If there is a **tie** in the absolute difference, then use the room with the **smallest** such `id`. If there is **no such room**, the answer is `-1`.

Return *an array* `answer` *of length* `k` *where* `answer[j]` *contains the answer to the* `jth` *query*.

Example 1:

```
Input: rooms = [[2,2],[1,2],[3,2]], queries = [[3,1],[3,3],[5,2]]
Output: [3,-1,3]
Explanation: The answers to the queries are as follows:
Query = [3,1]: Room number 3 is the closest as abs(3 - 3) = 0, and its size of 2 is at least 1. The answer is 3.
Query = [3,3]: There are no rooms with a size of at least 3, so the answer is -1.
Query = [5,2]: Room number 3 is the closest as abs(3 - 5) = 2, and its size of 2 is at least 2. The answer is 3.
```

Example 2:

```
Input: rooms = [[1,4],[2,3],[3,5],[4,1],[5,2]], queries = [[2,3],[2,4],[2,5]]
Output: [2,1,3]
Explanation: The answers to the queries are as follows:
Query = [2,3]: Room number 2 is the closest as abs(2 - 2) = 0, and its size of 3 is at least 3. The answer is 2.
Query = [2,4]: Room numbers 1 and 3 both have sizes of at least 4. The answer is 1 since it is smaller.
Query = [2,5]: Room number 3 is the only room with a size of at least 5. The answer is 3.
```

Constraints:

- `n == rooms.length`
- `1 <= n <= 105`
- `k == queries.length`
- `1 <= k <= 104`
- `1 <= roomIdi, preferredj <= 107`
- `1 <= sizei, minSizej <= 107`

