

1851. Minimum Interval to Include Each Query

Description

You are given a 2D integer array `intervals`, where `intervals[i] = [lefti, righti]` describes the `ith` interval starting at `lefti` and ending at `righti` **(inclusive)**. The **size** of an interval is defined as the number of integers it contains, or more formally `righti - lefti + 1`.

You are also given an integer array `queries`. The answer to the `jth` query is the **size of the smallest interval** `i` such that `lefti <= queries[j] <= righti`. If no such interval exists, the answer is `-1`.

Return *an array containing the answers to the queries*.

Example 1:

Input: `intervals = [[1,4],[2,4],[3,6],[4,4]]`, `queries = [2,3,4,5]`

Output: `[3,3,1,4]`

Explanation: The queries are processed as follows:

- Query = 2: The interval [2,4] is the smallest interval containing 2. The answer is $4 - 2 + 1 = 3$.
- Query = 3: The interval [2,4] is the smallest interval containing 3. The answer is $4 - 2 + 1 = 3$.
- Query = 4: The interval [4,4] is the smallest interval containing 4. The answer is $4 - 4 + 1 = 1$.
- Query = 5: The interval [3,6] is the smallest interval containing 5. The answer is $6 - 3 + 1 = 4$.

Example 2:

Input: `intervals = [[2,3],[2,5],[1,8],[20,25]]`, `queries = [2,19,5,22]`

Output: `[2,-1,4,6]`

Explanation: The queries are processed as follows:

- Query = 2: The interval [2,3] is the smallest interval containing 2. The answer is $3 - 2 + 1 = 2$.
- Query = 19: None of the intervals contain 19. The answer is -1.
- Query = 5: The interval [2,5] is the smallest interval containing 5. The answer is $5 - 2 + 1 = 4$.
- Query = 22: The interval [20,25] is the smallest interval containing 22. The answer is $25 - 20 + 1 = 6$.

Constraints:

- `1 <= intervals.length <= 105`
- `1 <= queries.length <= 105`
- `intervals[i].length == 2`
- `1 <= lefti <= righti <= 107`
- `1 <= queries[j] <= 107`

