

2276. Count Integers in Intervals

Description

Given an **empty** set of intervals, implement a data structure that can:

- **Add** an interval to the set of intervals.
- **Count** the number of integers that are present in **at least one** interval.

Implement the `CountIntervals` class:

- `CountIntervals()` Initializes the object with an empty set of intervals.
- `void add(int left, int right)` Adds the interval `[left, right]` to the set of intervals.
- `int count()` Returns the number of integers that are present in **at least one** interval.

Note that an interval `[left, right]` denotes all the integers `x` where `left <= x <= right`.

Example 1:

Input

```
["CountIntervals", "add", "add", "count", "add", "count"]
[[], [2, 3], [7, 10], [], [5, 8], []]
```

Output

```
[null, null, null, 6, null, 8]
```

Explanation

```
CountIntervals countIntervals = new CountIntervals(); // initialize the object with an empty set of intervals.
countIntervals.add(2, 3); // add [2, 3] to the set of intervals.
countIntervals.add(7, 10); // add [7, 10] to the set of intervals.
countIntervals.count();    // return 6
                           // the integers 2 and 3 are present in the interval [2, 3].
                           // the integers 7, 8, 9, and 10 are present in the interval [7, 10].

countIntervals.add(5, 8); // add [5, 8] to the set of intervals.
countIntervals.count();   // return 8
                           // the integers 2 and 3 are present in the interval [2, 3].
                           // the integers 5 and 6 are present in the interval [5, 8].
                           // the integers 7 and 8 are present in the intervals [5, 8] and [7, 10].
                           // the integers 9 and 10 are present in the interval [7, 10].
```

Constraints:

- $1 \leq \text{left} \leq \text{right} \leq 10^9$
- At most 10^5 calls in total will be made to `add` and `count`.
- At least **one** call will be made to `count`.

