6242. Closest Nodes Queries in a Binary Search Tree

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You are given the `root` of a **binary search tree** and an array `queries` of size `n` consisting of positive integers.

Find a **2D** array `answer` of size `n` where `answer[i] = [min`$_i$`, max`$_i$`]` :

- `min`$_i$ is the **largest** value in the tree that is smaller than or equal to `queries[i]` . If a such value does not exist, add −1 instead.
- `max`$_i$ is the **smallest** value in the tree that is greater than or equal to `queries[i]` . If a such value does not exist, add −1 instead.

Return *the array* `answer` .

User Accepted:	3
User Tried:	4
Total Accepted:	3
Total Submissions:	4
Difficulty:	Medium

Example 1:
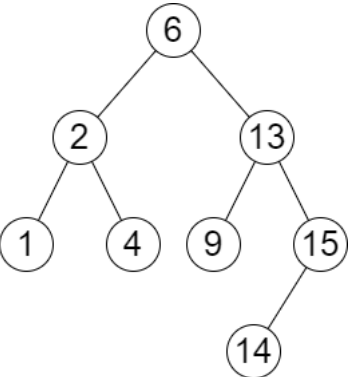

```
Input: root = [6,2,13,1,4,9,15,null,null,null,null,null,null,14], queries = [2,5,16]
Output: [[2,2],[4,6],[15,-1]]
Explanation: We answer the queries in the following way:
- The largest number that is smaller or equal than 2 in the tree is 2, and the smallest number that is greater or equal than 2
- The largest number that is smaller or equal than 5 in the tree is 4, and the smallest number that is greater or equal than 5
- The largest number that is smaller or equal than 16 in the tree is 15, and the smallest number that is greater or equal than
```

Example 2:
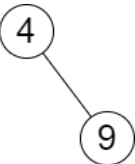

```
Input: root = [4,null,9], queries = [3]
Output: [[-1,4]]
Explanation: The largest number that is smaller or equal to 3 in the tree does not exist, and the smallest number that is great
```

Constraints:

- The number of nodes in the tree is in the range $[2, 10^5]$.
- `1 <= Node.val <= 10`^{6}
- `n == queries.length`
- `1 <= n <= 10`^{5}
- `1 <= queries[i] <= 10`^{6}

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