Connect Nodes at Same Level (NextRight Pointers)

Objective: Populate each node's `nextRight` pointer to point to its adjacent node on the same level.

Algorithm Steps:

Step 1: Use a queue for Level Order Traversal (BFS).

Step 2: For each level, determine its size using `q.size()`.

Step 3: Process nodes of the level one by one.

Step 4: For each node except the last node of that level, set `node->nextRight = q.front()` (next element in the queue).

Step 5: Push the node's left and right children into the queue if they exist.

Step 6: Continue until all levels are processed. Return the root node.

Pseudocode:

```
function connect(root):
    initialize queue q
    push root to q

    while q is not empty:
        size = q.size()

        for i = 0 to size-1:
            temp = q.front()
            q.pop()

            if i < size-1:
                temp.nextRight = q.front()

            if temp.left exists: q.push(temp.left)
            if temp.right exists: q.push(temp.right)

    return root
```

Complexity Analysis:

Time Complexity: O(n) - Each node is processed once.
Space Complexity: O(n) - Due to the queue storing nodes.