



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Experiment 5

Student Name: Sanjusha Singh

Branch: CSE

Semester: 6

Subject Name: AP lab-2

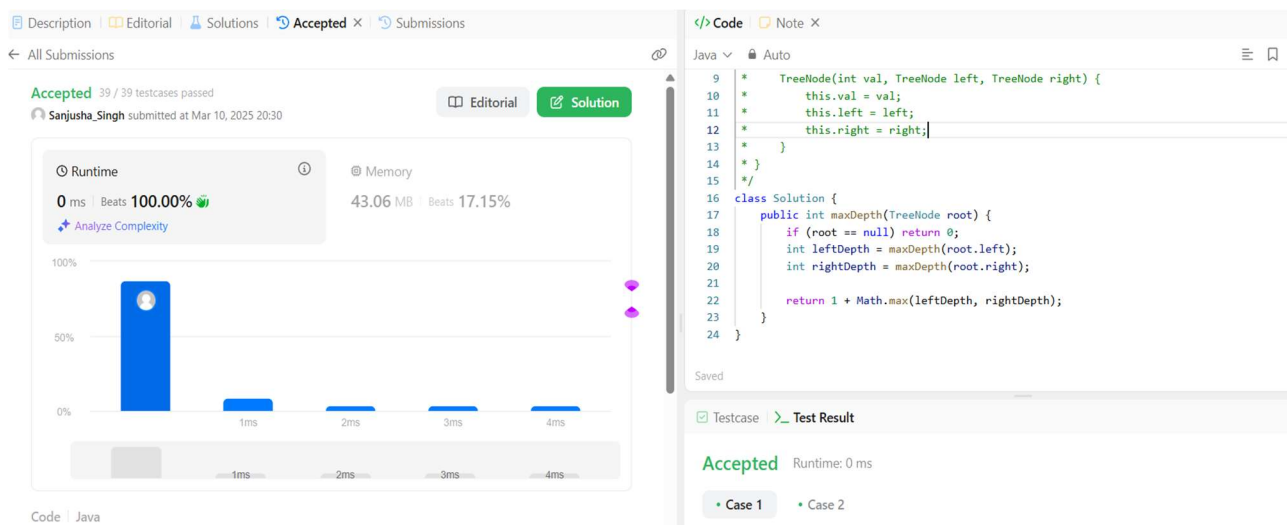
UID: 22BCS13130

Section/Group: 614/B

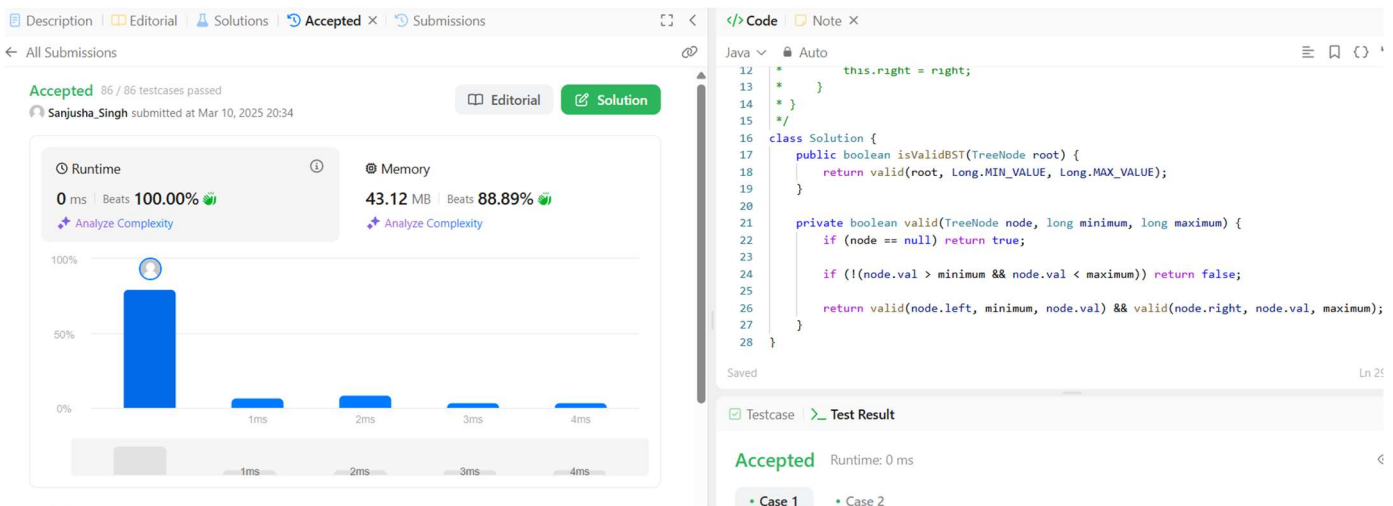
Date of Performance: 9/03/2025

Subject Code: 22CSP-351

Q 1. .Maximum Depth of Binary Tree



Q 2. Validate Binary Search Tree





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Q 3. Symmetric Tree

Accepted 200 / 200 testcases passed

Sanjusha_Singh submitted at Mar 10, 2025 20:37

Editorial Solution

Runtime

0 ms | Beats 100.00%

Analyze Complexity

Memory

41.72 MB | Beats 67.46%

Analyze Complexity



Code | Java

```
2  * Definition for a binary tree node.
3  * public class TreeNode {
4  *     int val;
5  *     TreeNode left;
6  *     TreeNode right;
7  *     TreeNode() {}
8  *     TreeNode(int val) { this.val = val; }
9  *     TreeNode(int val, TreeNode left, TreeNode right) {
10 *         this.val = val;
11 *         this.left = left;
12 *         this.right = right;
13 *     }
14 * }
15 */
16 class Solution {
17     public boolean isSymmetric(TreeNode root) {
```

Saved

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input

Q 4. Binary Tree Zigzag Level Order Traversal

Accepted 33 / 33 testcases passed

Sanjusha_Singh submitted at Mar 10, 2025 20:39

Editorial Solution

Runtime

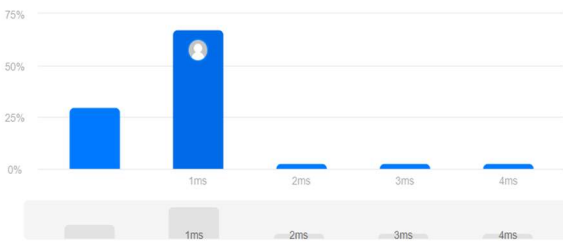
1 ms | Beats 69.87%

Analyze Complexity

Memory

42.26 MB | Beats 58.77%

Analyze Complexity



Code | Java

```
40         dq.offerLast(curr.right);
41     }
42     else{
43         if(curr.right != null)
44             dq.offerFirst(curr.right);
45         if(curr.left != null)
46             dq.offerFirst(curr.left);
47     }
48     leftToRight = !leftToRight;
49     result.add(currLevel);
50 }
51 return result;
52 }
```

Saved

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

Q 5. Lowest Common Ancestor of a Binary Tree

Accepted 32 / 32 testcases passed

Sanjusha_Singh submitted at Mar 10, 2025 20:42

Editorial Solution

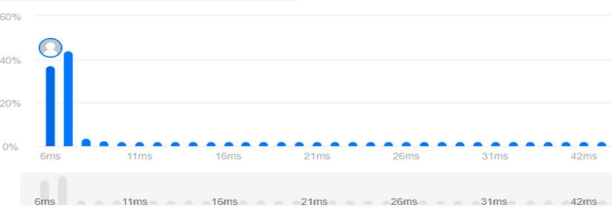
Runtime

6 ms | Beats 100.00%

Analyze Complexity

Memory

44.80 MB | Beats 59.46%



Code | Java

```
11 public TreeNode lowestCommonAncestor(TreeNode root, TreeNode p, TreeNode q) {
12     if (root == null || root == p || root == q) {
13         return root;
14     }
15     TreeNode left = lowestCommonAncestor(root.left, p, q);
16     TreeNode right = lowestCommonAncestor(root.right, p, q);
17     if (left != null && right != null) {
18         return root;
19     }
20     return left != null ? left : right;
21 }
22
23
24
25 }
```

Saved

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

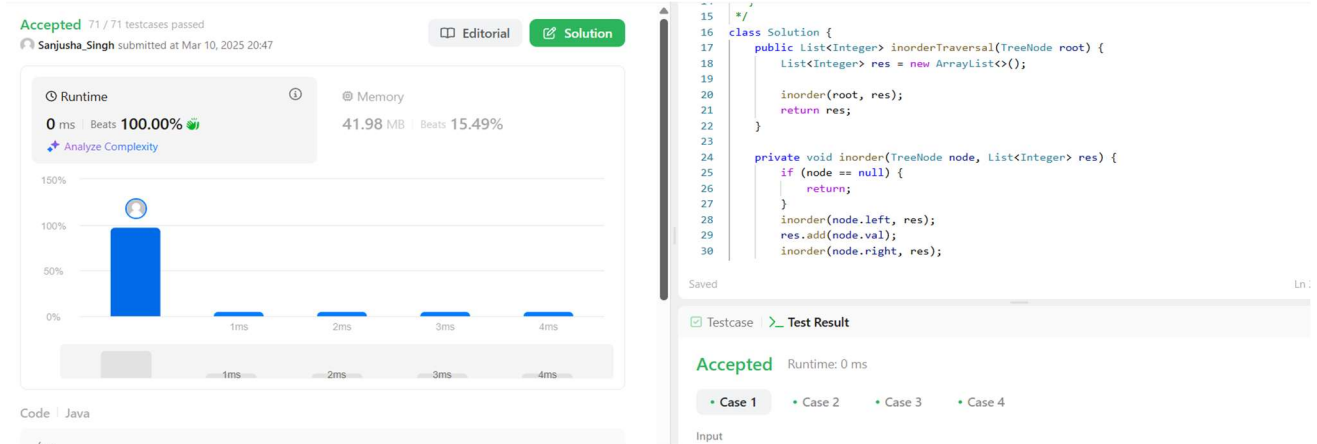
Input



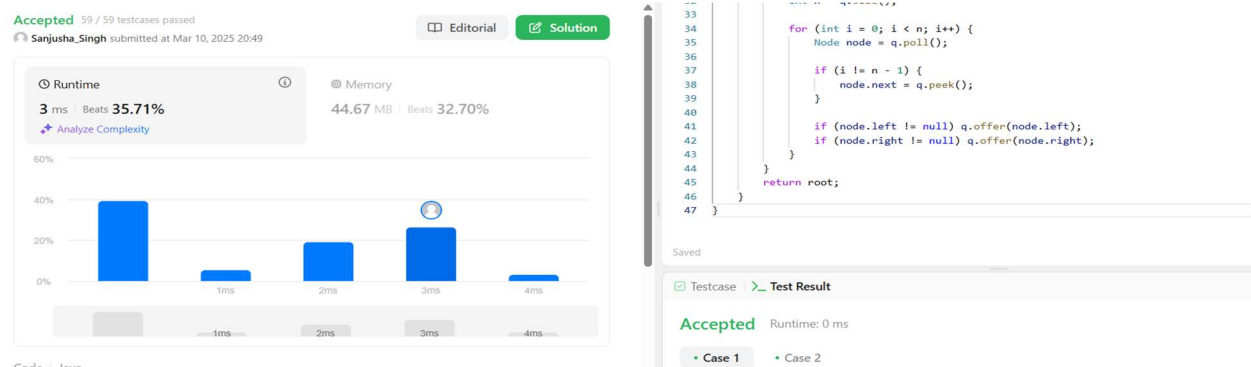
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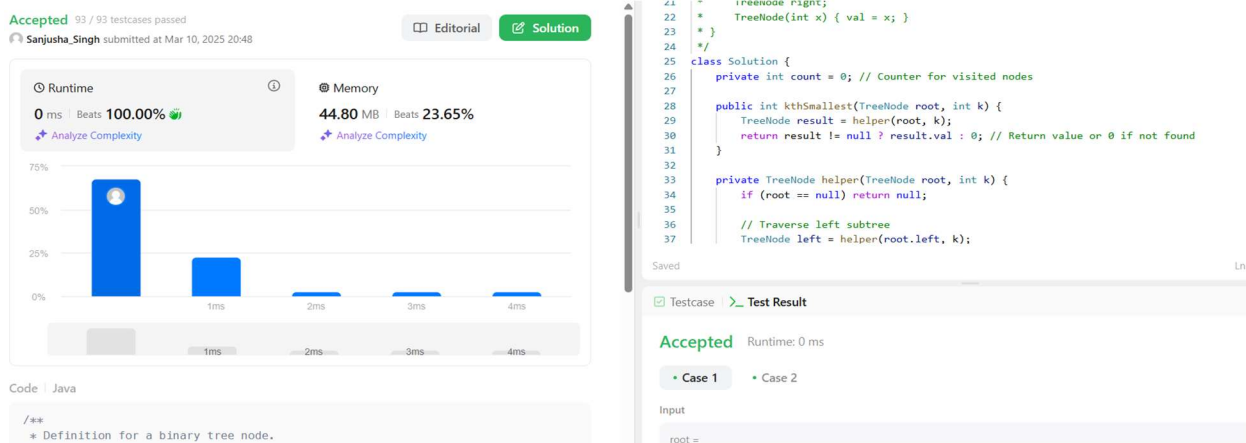
Q 6. Binary Tree Inorder Traversal



Q 8. Kth Smallest Element in a BST



Q 9. Populating Next Right Pointers in Each Node

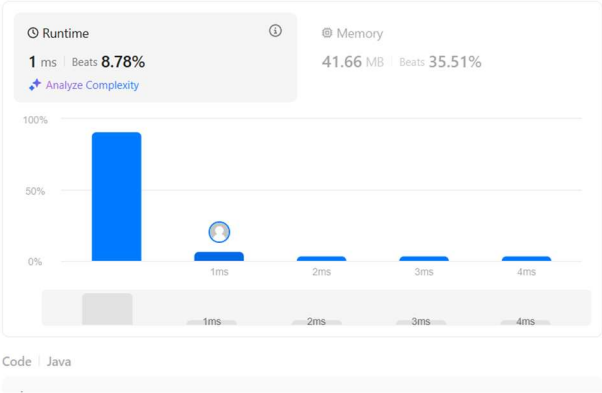




Q 10. Sum of Left Leaves

Accepted 100 / 100 testcases passed
Sanjusha_Singh submitted at Mar 10, 2025 20:52

Editorial Solution



```
15  */
16  class Solution {
17      public int sumOfLeftLeaves(TreeNode root) {
18          if (root == null) {
19              return 0;
20          }
21
22          Queue
```

Saved

Testcase

Test Result

Accepted Runtime: 0 ms

Case 1

Case 2

Input