#### EXPERIMENT -2.1

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SUBJECT- CC Lab- 2 SUBJECT CODE- 20CSP-351

### Q1. Balanced Binary Tree

```
CODE class Solution {
    public boolean isBalanced(TreeNode root) {

        return maxDepth(root) != -1;
    }

int maxDepth(TreeNode root) {
        if(root == null)
            return 0;

        int lh = maxDepth(root.left);
        if(lh == -1)
            return -1;

        int rh = maxDepth(root.right);
        if(rh == -1)
            return -1;

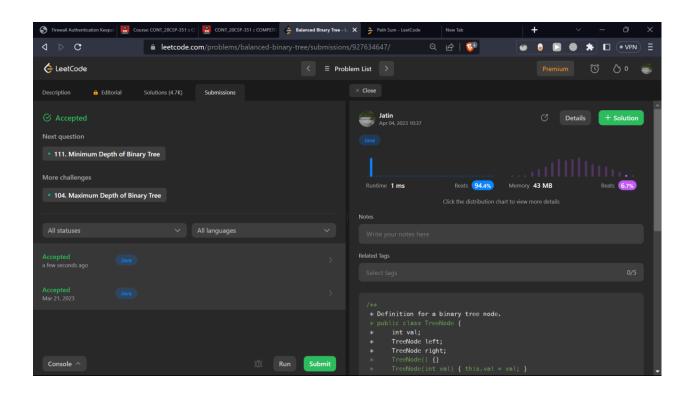
        if(Math.abs(lh - rh) > 1)
            return -1;

        return 1+Math.max(lh, rh);
    }
}
```

Output:



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#### Q2 Path Sum

```
Code: class Solution {
    public boolean hasPathSum(TreeNode root, int targetSum) {
        if(root==null) {
            return false;
        }
        if(root.left==null && root.right==null && root.val==targetSum) {
            return true;
        }
        if(hasPathSum(root.left,targetSum-
root.val)||hasPathSum(root.right,targetSum-root.val)) {
            return true;
        }else {
            return false;
        }
        return false;
    }
}
```



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```
}
}
```

#### Output:

