Description | Solution | Discuss (999+) | Submissions

C#

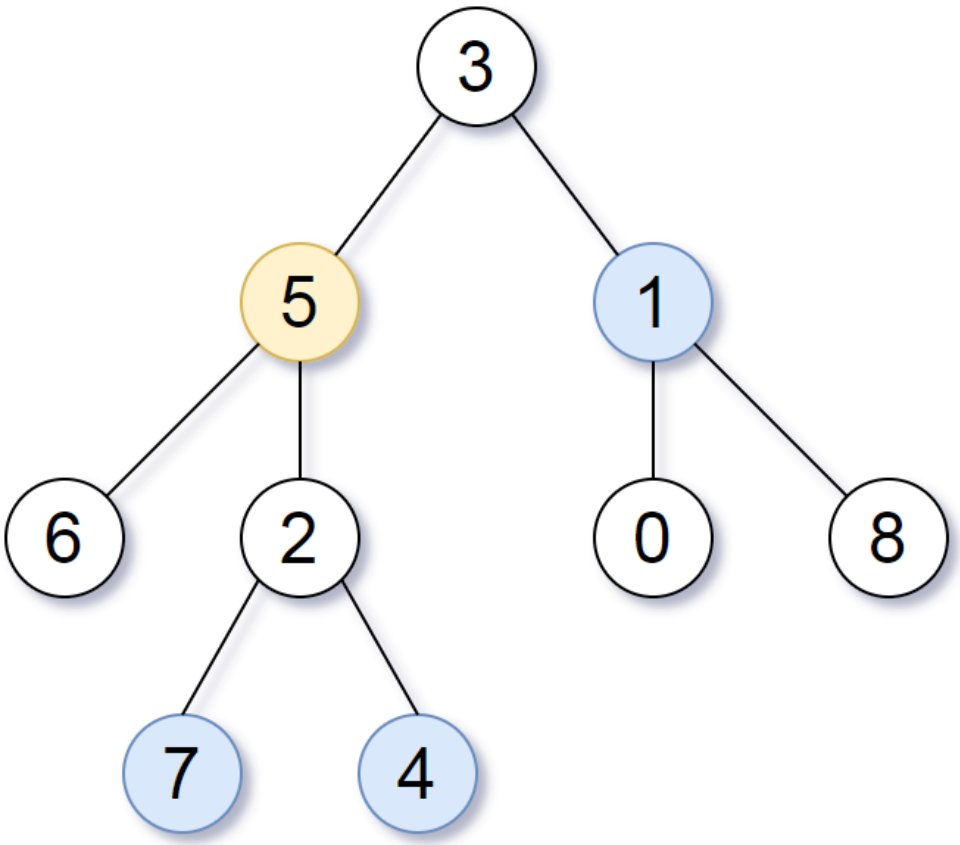
863. All Nodes Distance K in Binary Tree

Medium 5399 114 Add to List Share

Given the `root` of a binary tree, the value of a target node `target`, and an integer `k`, return *an array of the values of all nodes that have a distance `k` from the target node.*

You can return the answer in **any order**.

Example 1:




```
Input: root = [3,5,1,6,2,0,8,null,null,7,4], target = 5, k = 2
Output: [7,4,1]
Explanation: The nodes that are a distance 2 from the target node
(with value 5) have values 7, 4, and 1.
```

Example 2:

```
Input: root = [1], target = 1, k = 3
```

```
/**
 * Definition for a bin
node.
 * public class TreeNod
 *     public int val;
 *     public TreeNode
 *     public TreeNode
 *     public TreeNode(
val = x; }
 * }
 */
public class Solution {
    Dictionary<TreeNode
TreeNode> parent = new
Dictionary<TreeNode, Tr
();

    public IList<int>
DistanceK(TreeNode root
TreeNode target, int k)
        dfs(root, null);

        HashSet<TreeNode
new HashSet<TreeNode>()
        seen.Add(target)
        seen.Add(null);

        Queue<TreeNode>
Queue<TreeNode>();
        int level = 0;
        q.Enqueue(null);
        q.Enqueue(target
        while(q.Count >
        {
            var node =
```

Testcase | Run Code Result

Runtime Error

```
Unhandled exception.
System.NullReferenceExceptio
Object reference not set to
instance of an object.
Line 40:
Solution.DistanceK(TreeNode
TreeNode target, Int32 k) in
Solution.cs
Line 21:
__DriverSolution__.__Helper_
 param_1, Int32 param_2, Int
param_3, Int32 num_repeat) i
  Driver  .cs
```