PRINT ALL NODES AT DISTANCE K FROM ROOT OF A BINARY TREE

Given a Binary Tree and a positive integer ‘k’, write code which will print all the nodes which are at distance ‘k’ from the root.

For example: For Binary Tree on the right side, Following are the nodes which should get printed for the below values of ‘k’

<table>
<thead>
<tr>
<th>k</th>
<th>output</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>1</td>
<td>5 30</td>
</tr>
<tr>
<td>2</td>
<td>4 8 40</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
Solution:

```c
void printNodeAtDistance(Node *root, int k)
{
    if (root == NULL || k < 0)
        return;

    if (k == 0)
        printf("%d", root->data);

    else
    {
        printNodeAtDistance( root->left, k-1 );
        printNodeAtDistance( root->right, k-1 );
    }
}
```