

Code :

```
#include <bits/stdc++.h>

using namespace std;

struct node
{
    int data;
    struct node *left, *right;
};

void printkdistanceNodeDown(node *root, int k)
{
    if (root == NULL || k < 0) return;

    if (k==0)
    {
        cout << root->data << " ";
        return;
    }
    printkdistanceNodeDown(root->left, k-1);
    printkdistanceNodeDown(root->right, k-1);
}

int printkdistanceNode(node* root, node* target , int k)
{
    if (root == NULL) return -1;

    if (root == target)
```

```

{
    printkdistanceNodeDown(root, k);
    return 0;
}

int dl = printkdistanceNode(root->left, target, k);
if (dl != -1)
{
    if (dl + 1 == k)
        cout << root->data << endl;
    else
        printkdistanceNodeDown(root->right, k-dl-2);
    return 1 + dl;
}

int dr = printkdistanceNode(root->right, target, k);
if (dr != -1)
{
    if (dr + 1 == k)
        cout << root->data << endl;
    else
        printkdistanceNodeDown(root->left, k-dr-2);
    return 1 + dr;
}

return -1;
}

node *newnode(int data) {
    node *temp = new node;

```

```

temp->data = data;
temp->left = temp->right = NULL;
return temp;
}

int main()
{
    node * root = newnode(20);
    root->left = newnode(8);
    root->right = newnode(22);
    root->left->left = newnode(4);
    root->left->right = newnode(12);
    root->left->right->left = newnode(10);
    root->left->right->right = newnode(14);
    node * target1 = root->left->right;
    node * target2 = root->left;
    node * target3 = root->left->right->right;
    int k1 = 2, k2=2, k3 = 3;
    cout<<"Test case 1 :\n";
    printkdistanceNode(root, target1, k1);
    cout<<"Test case 2 :\n";
    printkdistanceNode(root, target2, k2);
    cout<<endl;
    cout<<"Test case 3 :\n";
    printkdistanceNode(root, target3, k3);
    cout<<endl;
    return 0;
}

```

Output :

```
Test case 1 :  
4 20  
Test case 2 :  
10 14 22  
Test case 3 :  
4 20  
  
-----  
Process exited after 0.05597 seconds with return value 0  
Press any key to continue . . .
```