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#include <bits/stdc++.h>

using namespace std;

class treeNode{
public:
    int data;
    treeNode*leftchild;
    treeNode*rightchild;

    treeNode(int value){
        data = value;
        leftchild = NULL;
        rightchild = NULL;
    }
};

void spacePrint(int level)
{
    for (int i = 0; i < level; i++)
    {
        cout << "    ";
    }
}

void printTree(treeNode *root, int level)
{
    if (root == NULL)
    {
        return;
    }
    if (root->leftchild == NULL && root->rightchild == NULL)
    {
        cout << root->data << endl;
    }
    else
    {
        cout << endl;
        spacePrint(level);
    }
}
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        cout << " Root: " << root->data << endl;
    }

    if (root->leftchild != NULL)
    {
        spacePrint(level);
        cout << " Left: ";
        printTree(root->leftchild, level + 1);
    }

    if (root->rightchild != NULL)
    {
        spacePrint(level);
        cout << " Right: ";
        printTree(root->rightchild, level + 1);
    }
}

void inOrder(treeNode *root, string &chk)
{
    if (root == NULL)
        return;

    inOrder(root->leftchild, chk);
    chk += to_string(root->data) + " ";
    inOrder(root->rightchild, chk);
}

treeNode*insertionBST(treeNode *root,int value){
    treeNode*newNode = new treeNode (value);
    if(root == NULL)
    {
        root = newNode;
        return root;
    }

    if(value<root->data){
        root->leftchild = insertionBST(root->leftchild,value);
    }
}

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        else if(value>root->data){
            root->rightchild = insertionBST(root->rightchild,value);
        }
        return root;
    }
}

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treeNode*searchBST(treeNode*root,int value){
    if(root==NULL){
        return NULL;
    }
    if(root->data == value){
        cout<<root->data;
        return root;
    }
    if(value<root->data)
    {
        cout<<root->data<<"->";
        searchBST(root->leftchild, value);
    }

    else
    {
        cout<<root->data<<"->";
        searchBST(root->rightchild, value);
    }
}

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treeNode*inordersucc(treeNode*root){
    treeNode *curr=root;
    while(curr->leftchild != NULL ){
        curr = curr->leftchild;
    }
    return curr;
}

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treeNode*deliationBST(treeNode*root, int value){

    if(value < root->data)
    {

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        root->leftchild= deliationBST(root->leftchild, value);
    }

    else if(value > root->data)
    {

        root->rightchild=deliationBST(root->rightchild, value);
    }
    else{
        if(root->rightchild==NULL)
        {
            treeNode *tmp = root->leftchild;
            free(root);
            return tmp;
        }
        else if(root->leftchild==NULL)
        {
            treeNode *tmp = root->rightchild;
            free(root);
            return tmp;
        }
        else{
            treeNode * tmp = inordersucc(root->rightchild);
            root->data = tmp->data;
            root->rightchild =deliationBST(root->rightchild,tmp->data);
        }
        return root;
    }
}

int main() {

    int n;
    cin>>n;
    treeNode *root =NULL;
    for(int i=0; i<n; i++){
        int value;
        cin>>value;
        root=insertionBST(root,value);
    }
}

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string travarsal="";
inOrder(root,travarsal);
cout<<travarsal<<endl;

int key;
cin>>key;

/*if(searchBST (root,key)==NULL) {
    cout<<endl<<"Value does not exist in BST"<<endl;
}
else{
    cout<<endl<<"Value exist in BST"<<endl;
}*/
root = deliationBST(root,key);
string after="";
inOrder(root,after);
cout<<after<<endl;

return 0;
}
```