```c
#include<stdio.h>
#include<stdlib.h>

struct node
{
    int key;
    struct node *left;
    struct node *right;
};

struct node *getNewNode(int val)
{
    struct node *newNode = malloc(sizeof(struct node));
    newNode->key   = val;
    newNode->left  = NULL;
    newNode->right = NULL;

    return newNode;
}

struct node *insert(struct node *root, int val)
{
    if(root == NULL)
        return getNewNode(val);

    if(root->key < val)
        root->right = insert(root->right,val);

    else if(root->key > val)
        root->left = insert(root->left,val);
    return root;
}

void inorder(struct node *root)
{
    if(root == NULL)
        return;
    inorder(root->left);
    printf("%d ",root->key);
    inorder(root->right);
```

```
}

int main()
{
    struct node *root = NULL;
    root = insert(root,100);
    root = insert(root,50);
    root = insert(root,150);
    root = insert(root,50);

    inorder(root);

    return 0;
}
```