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#include<stdio.h>
#include<stdlib.h>
struct node{
    int data;
    struct node *right;
    struct node *left;
};
struct node *getnode(int val)
{
    struct node *temp=(struct node*)malloc(sizeof(struct node));
    temp->right=NULL;
    temp->left=NULL;
    temp->data=val;
    return temp;
}
struct node *insert(struct node *root,int val)
{
    struct node *temp=getnode(val);
    if(root==NULL)
        return temp;

    struct node *cur=root;
    struct node *prev=NULL;
    while(cur!=NULL)
    {
        prev=cur;
        if(val<cur->data)
            cur=cur->left;
        else
            cur=cur->right;
    }
    if(val<prev->data)
    {
        prev->left=temp;
        return root;
    }
    else
        prev->right=temp;
    return root;
}
void inorder(struct node *root)
{
    if(root==NULL)
    {
        return;
    }
    inorder(root->left);
    printf("%d ",root->data);
    inorder(root->right);
}

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}
void postorder(struct node *root)
{
    if(root==NULL)
        return;
    postorder(root->left);
    postorder(root->right);
    printf("%d ",root->data);
}
void preorder(struct node *root)
{
    if(root==NULL)
        return;
    printf("%d ",root->data);
    preorder(root->left);
    preorder(root->right);
}
void main()
{
    int choice,val;
    struct node *root=NULL;
    printf("main
menu\n1.insert\n2.inorder\n3.postorder\n4.preorder\n5.exit\n");
    for(;;)
    {
        printf("\nenter your choice: ");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:printf("enter the value:");
                    scanf("%d",&val);
                    root=insert(root,val);
                    break;
            case 2:inorder(root);
                    break;
            case 3:postorder(root);
                    break;
            case 4:preorder(root);
                    break;
            case 5:printf("thank you!!");
                    exit(0);
            default:printf("invalid choice\n");
        }
    }
}

```