

```

#include<iostream>
#include <iomanip>
using namespace std;

class Binary
{
private:
    class Node
    {
    public :
        Node *left;
        int value;
        Node *right;

        Node(int v)
        {
            left = right = nullptr;
            value = v;
        }
    };
public:
    Node *head;

public:
    Binary():head(nullptr)
    {
    }

    Node* addnode(Node *n,int value)
    {
        if (nullptr==n)
            return new Node(value);

        if (n->value > value)
            n->left=addnode(n->left,value);

        else
            n->right=addnode(n->right,value);

        return n;
    }

    void inorder (Node* n)
    {
        if (n)
        {
            inorder(n->left);
            cout << n->value << endl;
            inorder(n->right);
        }
    }
}

```

```

void preorder( Node* n)
{
    if (n)
    {   cout << n->value << endl;
        preorder(n->left);
        preorder(n->right);
    }
}

```

```

void postorder( Node* n)
{
    if (n)
    {
        postorder(n->left);
        postorder(n->right);
        cout << n->value << endl;
    }
}

```

```

void print (Node *n)
{
    static int level=0;
    if (n)
    {
        level++;
        print(n->right);
        cout << setw(level *4) << n->value << endl;
        print(n->left);
        level--;
    }
}

```

```

};

```

```

int main()
{
    int num;

```

```

    Binary b1 ;

```

```

    while(cout<<"enter the element(o to stop)",cin>>num,num)
        b1.head = b1.addnode(b1.head,num);

```

```

    cout << "Inorder display" << endl;
    b1.inorder(b1.head);
    cout<<endl;

```

```

    cout << "PreOrder Display" << endl;
    b1.preorder(b1.head);

```

```
cout<<endl;
```

```
cout << "PostOrder Display" << endl;
```

```
b1.postorder(b1.head);
```

```
cout<<endl;
```

```
b1.print(b1.head);
```

```
}
```