#include<iostream>

using namespace std;

struct Node

{

int data;

Node\* left;

Node\* right;

};

Node\* root=new Node;

void Insertion()

{

Node\* temp=root;

Node\* prev;

Node\* val= new Node;

cout<<"\nEnter the node value\n";

cin>>val->data;

val->left=NULL;

val->right=NULL;

while(temp!=NULL)

{

prev=temp;

if(val->data<=temp->data)

{

temp=temp->left;

}

else

{

temp=temp->right;

}

}

if(val->data<=prev->data)

{

prev->left=val;

}

else

{

prev->right=val;

}

}

void Pre\_Order(Node\* temp)

{

if(temp!=NULL)

{

cout<<temp->data<<"\t";

Pre\_Order(temp->left);

Pre\_Order(temp->right);

}

}

void In\_Order(Node\* temp)

{

if(temp!=NULL)

{

In\_Order(temp->left);

cout<<temp->data<<"\t";

In\_Order(temp->right);

}

}

void Post\_Order(Node\* temp)

{

if(temp!=NULL)

{

Post\_Order(temp->left);

Post\_Order(temp->right);

cout<<temp->data<<"\t";

}

}

int main()

{

cout<<"\nEnter root nod\n";

cin>>root->data;

root->left=NULL;

root->right=NULL;

for(int i=0;i<6;i++)

Insertion();

cout<<"\nPre ORder:\n";

Pre\_Order(root);

cout<<"\nIn Order:\n";

In\_Order(root);

cout<<"\nPost Order:\n";

Post\_Order(root);

return 0;

}