**NAME:SAYALI JIVAN CHAUDHARI**

**ROLL NO.:14**

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**1)implementation of inorder preorder postorder**

#include<bits/stdc++>

#include<iostream>

using namespace std;

class Tree

{

public:

int data;

Tree \*left = NULL, \*right = NULL;

// Constructor initialised

Tree (int x)

{

data = x;

left = NULL;

right = NULL;

}

};

void preorder\_traversal (Tree \* root)

{

if (root == NULL)

return;

// Print the data

cout << root->data << " ";

// Visit Left subtree

preorder\_traversal (root->left);

// Visit right subtree

preorder\_traversal (root->right);

}

void inorder\_traversal (Tree \* root)

{

if (root == NULL)

return;

// Visit Left subtree

inorder\_traversal (root->left);

// Print the data

cout << root->data << " ";

// Visit right subtree

inorder\_traversal (root->right);

}

void postorder\_traversal (Tree \* root)

{

if (root == NULL)

return;

// Visit Left subtree

postorder\_traversal (root->left);

// Visit right subtree

postorder\_traversal (root->right);

// Print the data

cout << root->data << " ";

}

int main ()

{

Tree \*root = new Tree (17);

root->left = new Tree (10);

root->right = new Tree (11);

root->left->left = new Tree (7);

root->right->left = new Tree (27);

root->right->right = new Tree (9);

cout << "Preorder => ";

preorder\_traversal (root);

cout << endl;

cout << "Inorder => ";

inorder\_traversal (root);

cout << endl;

cout << "Postorder => ";

postorder\_traversal (root);

cout << endl;

return 0;

}