PROGRAM 14:

TREE TRAVERSAL:

#include <iostream>

using namespace std;

struct Node {

int data;

struct Node \*left, \*right;

};

Node\* newNode(int data)

{

Node\* temp = new Node;

temp->data = data;

temp->left = temp->right = NULL;

return temp;

}

void printPostorder(struct Node\* node)

{

if (node == NULL)

return;

printPostorder(node->left);

printPostorder(node->right);

cout << node->data << " ";

}

void printInorder(struct Node\* node)

{

if (node == NULL)

return;

printInorder(node->left);

cout << node->data << " ";

printInorder(node->right);

}

void printPreorder(struct Node\* node)

{

if (node == NULL)

return;

cout << node->data << " ";

printPreorder(node->left);

printPreorder(node->right);

}

int main()

{

struct Node\* root = newNode(1);

root->left = newNode(2);

root->right = newNode(3);

root->left->left = newNode(4);

root->left->right = newNode(5);

cout << "\nPreorder traversal of binary tree is \n";

printPreorder(root);

cout << "\nInorder traversal of binary tree is \n";

printInorder(root);

cout << "\nPostorder traversal of binary tree is \n";

printPostorder(root);

return 0;

}

OUTPUT:

