

```
1  #include <iostream>
2
3  using namespace std;
4  struct node {
5      int data;
6      struct node *left;
7      struct node *right;
8  };
9
10 struct node *createNode(int data) {
11     struct node *newNode = new (struct node);
12     newNode->data = data;
13     newNode->left = NULL;
14     newNode->right = NULL;
15     return newNode;
16 }
17
18 void inorder(struct node *root) {
19     if (root != NULL) {
20         inorder(root->left);
21         cout << root->data << " ";
22         inorder(root->right);
23     }
24 }
25
26 void preorder(struct node *root) {
27     if (root != NULL) {
28         cout << root->data << " ";
29         preorder(root->left);
30         preorder(root->right);
31     }
32 }
33
34 void postorder(struct node *root) {
35     if (root != NULL) {
36         postorder(root->left);
37         postorder(root->right);
38         cout << root->data << " ";
39     }
40 }
41
42 int main() {
43
44     struct node *root = createNode(1);
45     root->left = createNode(2);
46     root->right = createNode(3);
47     root->left->left = createNode(4);
48     root->left->right = createNode(5);
49     root->right->left = createNode(6);
```

```
50     root->right->right = createNode(7);
51
52
53     cout << "Inorder traversal: ";
54     inorder(root);
55     cout << endl;
56
57     cout << "Preorder traversal: ";
58     preorder(root);
59     cout << endl;
60
61     cout << "Postorder traversal: ";
62     postorder(root);
63     cout << endl;
64
65     return 0;
66 }
```