

# Assignment - 9

Write a program to implement all the binary tree traversal methods using classes.

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[https://github.com/RPChinhara-202117/DSA\\_Assignments.git](https://github.com/RPChinhara-202117/DSA_Assignments.git)

# Code:

```
29
30     void InOrder(Node *node)
31     {
32         if(node == NULL)
33             return;
34
35         InOrder(node->left);
36         cout<<node->data<<" ";
37         InOrder(node->right);
38     }
39
40     // Printing a Binary Tree according to PreOrder Traversal
41
42     void PreOrder(Node *node)
43     {
44         if(node == NULL)
45             return;
46
47         cout<<node->data<<" ";
48         PreOrder(node->left);
49         PreOrder(node->right);
50     }
51 };
52
53
54
55 int main()
56 {
57     Node *root = new Node(1);
58     root->left = new Node(2);
59     root->right = new Node(3);
60     root->left->left = new Node(4);
61     root->left->right = new Node(5);
62
63     cout<<"\nPreOrder Traversal of Binary Tree is \n";
64     (*root).PreOrder(root);
65
```

```
48         PreOrder(node->left);
49         PreOrder(node->right);
50     }
51 };
52
53
54
55 int main()
56 {
57     Node *root = new Node(1);
58     root->left = new Node(2);
59     root->right = new Node(3);
60     root->left->left = new Node(4);
61     root->left->right = new Node(5);
62
63     cout<<"\nPreOrder Traversal of Binary Tree is \n";
64     (*root).PreOrder(root);
65
66     cout<<"\nInOrder Traversal of Binary Tree is \n";
67     (*root).InOrder(root);
68
69     cout<<"\nPostOrder Traversal of Binary Tree is \n";
70     (*root).PostOrder(root);
71
72     cout<<endl;
73
74     return 0;
75 }
```

# Terminal Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
sal/"TreeTraversal
rudrachinhara@dell-vostro:~/Documents/CUH/3rd Sem/Data Structure and Algorithms/DSA_Assignments$ cd "/home/rudrachinhara/Documents/CUH/3rd
Sem/Data Structure and Algorithms/DSA_Assignments/Assignment-9/TreeTraversal/" && g++ TreeTraversal.cpp -o TreeTraversal && "/home/rudrachi
nhara/Documents/CUH/3rd Sem/Data Structure and Algorithms/DSA_Assignments/Assignment-9/TreeTraversal/"TreeTraversal

PreOrder Traversal of Binary Tree is
1 2 4 5 3
InOrder Traversal of Binary Tree is
4 2 5 1 3
PostOrder Traversal of Binary Tree is
4 5 2 3 1
rudrachinhara@dell-vostro:~/Documents/CUH/3rd Sem/Data Structure and Algorithms/DSA_Assignments/Assignment-9/TreeTraversal$ |
Ln 70, Col 13  Spaces: 4  UTF-8  LF  C++  Linux  ↵  🔍
```