

```

1  #include<stdio.h>
2  #include<stdlib.h>
3  #include<iostream>
4  #include<stack>
5
6  using namespace std;
7
8  struct BinaryNode
9  {
10     struct BinaryNode *left;
11     struct BinaryNode *right;
12     int data;
13 };
14
15 stack <BinaryNode *> s;
16
17
18 struct BinaryNode * createBinaryNode(int data)
19 {
20     struct BinaryNode * B= (struct BinaryNode *)malloc(sizeof(struct BinaryNode));
21     B->left=NULL;
22     B->right=NULL;
23     B->data=data;
24     return B;
25 }
26 void preOrder(struct BinaryNode *root)
27 {
28     if(root==NULL)
29         return;
30
31     s.push(root);
32     while(!s.empty())
33     {
34         struct BinaryNode *a=s.top();
35         s.pop();
36         printf("%2d\t",a->data);
37
38         if(a->right)
39             s.push(a->right);
40         if(a->left)
41             s.push(a->left);
42     }
43
44 }
45 int main()
46 {
47     struct BinaryNode * root=createBinaryNode(10);
48     root->left=createBinaryNode(20);
49     root->right=createBinaryNode(30);
50     root->left->left=createBinaryNode(40);
51     root->left->right=createBinaryNode(50);
52     root->right->left=createBinaryNode(60);
53     root->right->right=createBinaryNode(70);
54
55     preOrder(root);
56
57 }

```