

```

1  #include<stdio.h>
2  #include<stdlib.h>
3
4  struct BinaryTree
5  {
6      struct BinaryTree *left;
7      int data;
8      struct BinaryTree *right;
9  };
10
11 struct BinaryTree * CreateBinaryNode(int value)
12 {
13     struct BinaryTree *node = (struct BinaryTree *)malloc(sizeof(struct BinaryTree));
14     node->left=NULL;
15     node->data=value;
16     node->right=NULL;
17     return node;
18 }
19
20 void printArray(int path[],int pathlength)
21 {
22     for(int i=0;i<pathlength;i++)
23         printf("%d-->",path[i]);
24     printf("\n\n");
25 }
26
27 void AllpathsinTree(struct BinaryTree *root,int path[],int pathlength)
28 {
29     if(root==NULL)
30         return;
31     path[pathlength]=root->data;
32     pathlength++;
33     if(root->left==NULL&&root->right==NULL)
34         printArray(path,pathlength);
35     else
36     {
37         AllpathsinTree(root->left,path,pathlength);
38         AllpathsinTree(root->right,path,pathlength);
39     }
40
41
42 }
43
44
45
46
47 int main()
48 {
49     struct BinaryTree *root;
50     root=CreateBinaryNode(10);
51     root->left=CreateBinaryNode(20);
52     root->left->left=CreateBinaryNode(30);
53     root->right=CreateBinaryNode(40);
54     root->right->right=CreateBinaryNode(50);
55
56
57     int path[20];
58     AllpathsinTree(root,path,0);
59 }

```