

```

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
21 int leastCommonAncestor(struct BinaryTree *root,int a, int b)
22 {
23     if(!root)
24         return 0;
25     if(root->data==a || root->data==b)
26         return root->data;
27     int left=leastCommonAncestor(root->left,a,b);
28     int right=leastCommonAncestor(root->right,a,b);
29
30     if(left&&right)
31         return root->data;
32     else
33         return (left?left:right);
34 }
35
36 int main()
37 {
38     struct BinaryTree *root;
39     root=CreateBinaryNode(10);
40     root->left=CreateBinaryNode(20);
41     root->left->left=CreateBinaryNode(30);
42     root->right=CreateBinaryNode(40);
43     root->right->right=CreateBinaryNode(50);
44
45     printf("least common ancestor is %d",leastCommonAncestor(root,30,50));
46 }
47

```