

```

1  #include<iostream>
2  #include<stdio.h>
3  #include<stdlib.h>
4  #include<queue>
5
6  using namespace std;
7
8  struct BinaryNode
9  {
10     struct BinaryNode *left;
11     struct BinaryNode *right;
12     int data;
13 };
14
15 struct BinaryNode * createBinaryNode(int value)
16 {
17     struct BinaryNode *B=(struct BinaryNode *)malloc(sizeof(struct BinaryNode));
18     B->left=NULL;
19     B->right=NULL;
20     B->data=value;
21     return B;
22 }
23
24 queue <BinaryNode *> q;
25
26 int levelHavingMaxSum(struct BinaryNode *root)
27 {
28     int current_sum=0,max_sum=0,ans;
29     if(!root)
30         return 0;
31     q.push(root);
32     q.push(NULL);
33     int level=1;
34     while(!q.empty())
35     {
36         struct BinaryNode * temp=q.front();
37         q.pop();
38         if(temp==NULL)
39         {
40             if(!q.empty())
41             {
42                 q.push(NULL);
43             }
44
45             if(current_sum>max_sum)
46             {
47                 max_sum=current_sum;
48                 ans=level;
49             }
50
51             level++;
52             current_sum=0;
53         }
54
55         else
56         {
57             current_sum=current_sum+(temp->data);
58             if(temp->left)
59                 q.push(temp->left);
60             if(temp->right)
61                 q.push(temp->right);
62         }
63     }
64     return ans;
65 }
66

```

```
67  int main()
68  {
69      struct BinaryNode *root=createBinaryNode(10);
70      root->right=createBinaryNode(2000);
71      root->left=createBinaryNode(30);
72      root->left->left=createBinaryNode(0);
73      root->left->right=createBinaryNode(0);
74      root->right->right=createBinaryNode(2031);
75      root->right->left=createBinaryNode(0);
76
77      printf("level Having Max Sum is %d",levelHavingMaxSum(root));
78  }
```