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1 #include <stdio.h>
2 #define MAX 100
3 struct Node {
4     int data;
5     int left;
6     int right;
7 };
8 struct Node tree[MAX];
9 int nodeCount = 0;
10 int createNode(int data) {
11     tree[nodeCount].data = data;
12     tree[nodeCount].left = -1;
13     tree[nodeCount].right = -1;
14     return nodeCount++;
15 }
16 void kthSmallestUtil(int index, int k, int *count, int *result) {
17     if (index == -1 || *count >= k) return;
18     kthSmallestUtil(tree[index].left, k, count, result);
19     (*count)++;
20     if (*count == k) {
21         *result = tree[index].data;
22         return;
23     }
24     kthSmallestUtil(tree[index].right, k, count, result);
25 }
```

```
26 int kthSmallest(int rootIndex, int k) {
27     int count = 0, result = -1;
28     kthSmallestUtil(rootIndex, k, &count, &result);
29     return result;
30 }
31 int main() {
32     int root = createNode(20);
33     int n1 = createNode(8);
34     int n2 = createNode(22);
35     int n3 = createNode(4);
36     int n4 = createNode(12);
37     int n5 = createNode(10);
38     int n6 = createNode(14);
39     tree[root].left = n1;
40     tree[root].right = n2;
41     tree[n1].left = n3;
42     tree[n1].right = n4;
43     tree[n4].left = n5;
44     tree[n4].right = n6;
45     printf("K = 3, Kth Smallest = %d\n", kthSmallest(root, 3));
46     printf("K = 5, Kth Smallest = %d\n", kthSmallest(root, 5));
47     return 0;
48 }
```

K = 3, Kth Smallest = 10

K = 5, Kth Smallest = 14