Christopher Holmes ID: 002928626 Final Coding 2/27/19

In this final coding assignment, we were tasked with implementing two functions. The first function was a function to insert nodes from an ordered array into a balanced binary search tree. The second function was to find the level in the binary tree of a given node. We were then to implement both of these functions in the main function accordingly. This program accomplishes all that.

When provided with the array Input1 with numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, we get the following output:

```
<terminated> (exit value: 0) FinalCod
***Input1***
Node 1: 2
Node 2: 1
Node 3: 2
Node 4: 3
Node 5: 0
Node 5: 0
Node 6: 2
Node 7: 3
Node 8: 1
Node 9: 2
Node 10: 3
```

When provide with the array Input2 with numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, we get the following output:

<terminated> (exit value: 0) FinalC-

```
***Input2***
Node 1: 2
Node 2: 3
Node 3: 1
Node 4: 2
Node 5: 3
Node 6: 0
Node 7: 2
Node 8: 3
Node 9: 1
Node 10: 2
Node 11: 3
```

When provided with the array Input3 with numbers 1, we get the following output:

Input3 Node 1: 0