

```

1  #include <iostream>
2  #include "bst.h"
3  using namespace std;
4
5  int main() {
6
7      // Prelude
8      cout << "\n" << "\tJulio R. Corzo\n" << "\tCSC245 - Lab 4\n" << endl;
9
10     // Step 1: Instationation of BST with 0 as ITEM_NOT_FOUND.
11     BinarySearchTree<int> t(0);
12
13     // Step 2: Populating the tree with the indicated nodes.
14     t.insert(6);
15     t.insert(8);
16     t.insert(2);
17     t.insert(1);
18     t.insert(4);
19     t.insert(3);
20
21     // Step 5: Sample call to postOrder().
22     cout << "\tpostOrder() method test\n" << "\tTree t in postOrder: \t";
23     t.postOrder();
24     cout << endl;
25
26     // Step 7: Checking height() method on tree t and empty tree.
27     cout << "\n\theight() method test" << endl;
28     if(t.isEmpty()) {
29         cout << "\tError: Tree t is empty." << endl;
30     } else {
31         cout << "\tTree t height: \t" << t.height() << endl;
32     }
33
34     BinarySearchTree<int> t2(0);
35     if(t2.isEmpty()) {
36         cout << "\tError: Tree t2 is empty." << endl;
37     } else {
38         cout << "\tTree t2 height: \t" << t2.height() << endl;
39     }
40
41     // Step 9 part 2: Calls to check to see if isBalanced() is working
42     • properly.
43     cout << "\n\tisBalanced() method test" << endl;
44     switch(t.isBalanced()) {
45         case 1: cout << "\tTree t is Balanced!" << endl; break;
46         default: cout << "\tTree t is not Balanced!" << endl;
47     }
48
49     switch(t2.isBalanced()) {
50         case 1: cout << "\tTree t2 is Balanced!" << endl; break;
51         default: cout << "\tTree t2 is not Balanced!" << endl;
52     }

```

```
51     '
52
53     cout << endl;
54 }
55
```