Pseudo-code

**//creating the structure**

**struct Node {**

**value;**

**node\* right;**

**node\* left;**

**}**

**struct BSTree {**

**node\* root;**

**int level;**

**}**

**//** **create add node function & initialize new node with value**

**Struct Node \* addNode (struct node \* current, value) {**

**If current == NULL then**

**Struct node \* newNode**

**Newnode 🡪 left, right value = 0**

**Return newNode**

**Else if current🡪 value = value then current 🡪 left = addNode(current🡪 left, value)**

**Else current 🡪 right = addNode(current 🡪 right, value)**

**Return current**

**}**

**//add new level to BSTree & make root the new level with the new value**

**function addNodeToTree ( struct BSTree \* tree, value) {**

**tree 🡪 root = addNode(tree 🡪 root, value)**

**tree 🡪 levelCount++**

**}**

**// create lookup function**

**function valueInTree ( struct BSTree \* tree, value) {**

**new node \* current = tree 🡪 root**

**if value == current 🡪 value return true**

**else if value < current then current = current 🡪 left**

**else if value > current then current = current 🡪 right**

**}**

The source code was pulled from <https://github.com/Mankee/CS261/tree/master/Assignment5>

