

Add the following recursive methods to the `BinarySearchTree` that is found in the network Handout folder.

1. `public int countLeafs(TreeNode root)`

2. Write a recursive function `treeDepth` that returns the depth of a binary tree where `root` is the root node and a tree with one root node is considered to have a depth of zero.

```
public int treeDepth(TreeNode root)
```

3. Write a recursive function `internalPathLength` that returns the total sum of the paths that lead from the root to all other internal nodes of the binary tree. (An internal node is a node that contains a data element, as opposed to an external node which is a empty position that is not filled with a data element.)

```
public int internalPathLength(TreeNode root, int pathsSoFar)
```