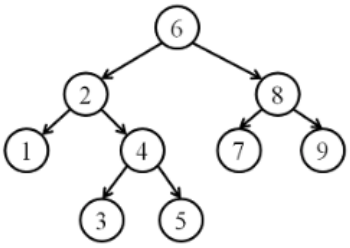
Definition of a ***TreeNode***

```
class TreeNode {
      int value;
      TreeNode left;
      TreeNode right;
      public TreeNode(int value) {this.value = value;}
      public TreeNode(int value, TreeNode left, TreeNode right) {
         this.value = value;
         this.left = left;
         this.right = right;
      }
  }
```

1) Given the root of a ***binary tree,*** find the sum of right leaves in a binary tree. Right leaf means that the node is a leaf and right child of its parent
2) Given the root of a **binary search tree**, modify it so that every value in the BST is changed to the original value plus the average of all values greater than itself in BST. Let average be an integer number.
3) Given the root of a ***binary tree***, calculate the average depth of the nodes in the tree.



Average depth is 1.778

Use the associated template. Create as many methods as you wish, just do not change the signatures of the given methods.