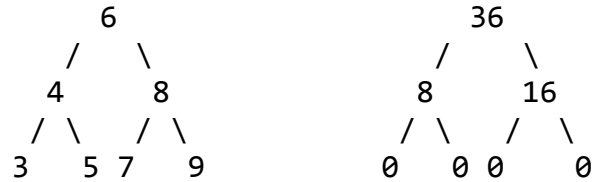


c. Suppose that we want to write a method `sumDescendants`, which replaces the value of each node in a tree with the sum of all of its descendants' values (not including itself), and then returns the sum of its original value (before being changed) plus all of its descendants' values.

For example, given the tree on the left, `sumDescendants` on node 6 would return 42 and change the tree to look like the one on the right (since $36 + 6 = 42$).



Fill in the `sumDescendants` method. You may not need all lines. Do not use more lines.

```

public class TreeNode {
    public TreeNode left, right;
    public int value;

    public TreeNode(int n) {
        value = n;
    }

    /* Replaces value with sum of all of its descendants' values. */
    public int sumDescendants() {
        if (left == null && right == null) {
            int oldVal = value;
            _____;
            return oldVal;
        } else {
            _____
            _____
            _____
            _____
            _____
            _____
            _____
            int oldVal = value;
            _____;
            return oldVal + value;
        }
    }
}

```