**Question: A**

def modify\_tree(tree1, tree2, k):

if tree1 is None or tree2 is None:

return

if tree1.data == tree2.data:

if tree1.data % k == 0:

# Replace with 100 if divisible

tree1.data = 100

else:

# Replace with sum if not equal

tree1.data = tree1.data + tree2.data

modify\_tree(tree1.left, tree2.left, k)

modify\_tree(tree1.right, tree2.right, k)

**Question: B**

def modify\_tree(tree1, tree2, k):

if tree1 is None or tree2 is None:

return

if tree1.data == tree2.data:

# Replace with sum if equal

tree2.data = tree1.data + tree2.data

else:

if tree2.data % k == 0:

# Replace with 100 if divisible by k

tree2.data = 100

modify\_tree(tree1.left, tree2.left, k)

modify\_tree(tree1.right, tree2.right, k)

| Criteria | Mark | Description |
| --- | --- | --- |
| Correctness of Logic | 6 | Correctly computes replace the values for both cases |
| Correct use of base case | 4 | Where the recursive function should stop |
| Correct recursive call | 3 |  |
| Code Readability | 2 | Well-structured, properly indented, and uses meaningful variable names. |