Lab Program 3

Leet Code: Inorder

```
struct TreeNode * newNode (int val) {
    struct TreeNode * node = (struct TreeNode*)
                malloc (sizeof (struct TreeNode));
    node -> val = val;
    node -> left = NULL;
    node -> right = NULL
    return node;
}

void inorder (struct TreeNode* root, struct TreeNode**
                                        prev) {
    if (root == NULL)
        return;

    inorder (root -> left, prev);

    if (*prev != NULL) {
        (*prev) -> right = root;
        (*prev) -> left = NULL;
    }
    *prev = root;
    inorder (root -> right, prev);
}

struct TreeNode * increasingBST (struct
                    TreeNode* root)
{
    struct TreeNode* dummy = newNode(0);
    struct TreeNode* prev = dummy;
    inorder (root, &prev);
    return dummy -> right;
}
```

Case 1:

Input:
root = [5, 3, 6, 2, 4, null, 8, 1, null, null, null, 7, 9]

Output:
[1, null, 2, null, 3, null, 4, null, 5, null, 6, null, 7, null, 8, null, 9]

Case 2:

Input:
root: [5, 1, 7]

Output:
[1, null, 5, null, 7]

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