

## 1) (5 pts) DSN (Binary Trees)

Write a **recursive** function to print a postorder traversal of all the integers in a binary tree. The node struct and function signature are as follows:

```
typedef struct node
{
    struct node *left;
    struct node *right;
    int data;
} node;

void print_postorder(node *root)
{
    if (root == NULL)
        return;

    postorder(root->left);
    postorder(root->right);
    printf("%d ", root->data);
}
```

**Grading:**

**+1 point** for correct base case

**+1 point** for making both recursive calls (regardless of order)

**+1 point** for printing root->data (regardless of order)

**+1 point** for having both recursive calls, printing root->data, **and** doing all those things in the correct order.

**+1 point** for getting all the syntax correct. (So, for example, if they called *postorder(root.left)* and *postorder(root.right)*, they can get the 1 point for making both recursive calls, but they lose this 1 point for using the dot instead of the arrow.)