

## 1) (10 pts) DSN (Binary Search Trees)

Write a recursive function to find the leaf node in a binary search tree storing the minimum value. (Thus, of all leaf nodes in the binary search tree, the function must return a pointer to the one that stores the smallest value.) If the pointer passed to the function is NULL (empty tree), the function should return NULL.

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

bstNode* find_min_leaf(bstNode* root) {

    if (root == NULL)                // 1 pt
        return NULL;                // 1 pt

    if (root->left == NULL && root->right == NULL) // 2 pts
        return root;                // 1 pt

    if (root->left != NULL)           // 1 pt
        return find_min_left(root->left); // 2 pts

    return find_min_left(root->right); // 2 pts

}
```