Difficult Questions Exam 2 review:

Write a segment of code that **efficiently** merges the values of two sorted linked lists into a longer sorted linked list. The resulting linked list should contain all new values (i.e. the original linked lists should not be modified). Use the provided struct definitions and function prototypes. Assume that the function createNode has already been implemented. The head of the new list should be returned.

Struct Node{

Int data;

Node \* next;

};

Node \* createNode(int);

Node \* mergeListts(Node \* head1, Node \* head2)

{

// write your function here.

}

Write a segment of code that **efficiently** finds the smaller value in a given tree (the value that is largest but less than some target). Use the provided struct definition and function prototype. If no value that is smaller than the subtree exists, please return some predefined VERY\_SMALL\_VALUE.

Struct BSTNode

{

Int data;

BSTNode \* l, \*r, \*p;

};

Int smaller(BSTNode \* root, int targets)

{

// write your function here

}