Lab 6

Problem Statement:

Given the root node of a binary search tree, replace the value of every node in the tree with the sum of all nodes greater than or equal to that value in the tree. Print the in-order traversal of the new tree.

Code Template:

Find the template code for this assignment in the following link :
https://drive.google.com/file/d/1A89vPrO1bDWOEpDAd4ICGxJkjc-sYGdR/view?usp=sharing

Please note that you only have to write the code for the inorderTraversal and solve functions.

Input:

The first line of the input contains an integer n <= 10^6 - the number of nodes in the BST.

The next line contains n integers in sorted order – an array arr representing the initial values of the nodes in the BST.

Note : The constructBst function defined in the given template will construct the BST from the array arr.

Output:

Print the n integers representing the in-order traversal of the tree obtained as defined in the problem statement.

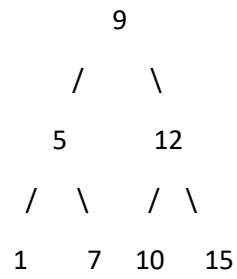
Sample testcases:

Input	Output
5 1 2 3 4 5	15 14 12 9 5
7 1 5 7 9 10 12 15	59 58 53 46 37 27 15

Explanation:

For the second sample testcase, the initial BST and the newly obtained tree are as shown below.

Initial BST:



New tree: