**Modified the BST**

**Problem Statements :**

You are given an array of integers. First of all , You have to form a binary search tree from given integers. Now you have modify the BST so that all greater values in the given BST are added to every node.

**Input Format :**

First line contains integer t as number of test cases.

Each test case contains two lines. First line contains an integer n which is length of the array and second line contains n space separated integer.

**Constraints :**

1 < t < 20

1< n < 50

**Output Format :**

For each test case you have to print preorder traversal of the original tree as well as modified tree.

**Sample Input :**

1

7

50 30 40 20 70 80 60

**Sample Output :**

50 30 20 40 70 60 80

260 330 350 300 150 210 80

**Explanation :**

Original Tree :

. 50  
 / \  
 30 70  
 / \ / \  
 20 40 60 80

Modified Tree :

260  
 / \  
 330 150  
 / \ / \  
 350 300 210 80

**Time Limit :**

none