

Merge two BST 's

Difficulty: **Medium** Accuracy: **64.95%** Submissions: **86K+** Points: **4**

Given two BSTs, return elements of merged BSTs in **sorted** form.

Examples :

Input:

BST1:

```

      5
     / \
    3   6
   / \
  2   4
BST2:
      2
     / \
    1   3

```

Output: 1 2 2 3 3 4 5 6 6 7

Explanation: After merging and sorting the two BST we get 1 2 2 3 3 4 5 6 6 7.

Input:

BST1:

```

      12
     /
    9
   /\
  6  11
BST2:
      8
     /\
    5  10
   /
  2

```

Output: 2 5 6 8 9 10 11 12

Explanation: After merging and sorting the two BST we get 2 5 6 8 9 10 11 12.

Expected Time Complexity: $O((m+n)*\log(m+n))$

Expected Auxiliary Space: $O(\text{Height of BST1} + \text{Height of BST2} + m + n)$

Constraints:

$$1 \leq \text{Number of Nodes, value of nodes} \leq 10^5$$
[Try more examples](#)

Seen this question in a real interview before ?


Yes No

Topic Tags

Related Articles

[🔔 Report An Issue](#)

If you are facing any issue on this page. Please let us know.

Discover your potential with Deutsche Bank. Innovate, grow, and succeed globally in your career 

```

1  // Driver Cde Starts
2  // Initial Template for Java
3
4  /*package whatever //do not write package name here */
5
6  import java.io.*;
7  import java.math.*;
8  import java.util.*;
9
10 class Node {
11     int data;
12     Node left, right;
13
14     public Node(int d) {
15         data = d;
16         left = right = null;
17     }
18 }
19
20 class GFG {
21     static Node buildTree(String str) {
22         // Corner Case
23         if (str.length() == 0 || str.equals('\n')) return null;
24         String[] s = str.split(" ");
25
26         Node root = new Node(Integer.parseInt(s[0]));
27         Queue<Node> q = new LinkedList<Node>();
28         q.add(root);
29
30         // Starting from the second element
31         int i = 1;
32         while (!q.isEmpty() && i < s.length) {
33             // Get and remove the front of the queue
34             Node currNode = q.remove();
35
36             // Get the next node's value from the string

```

Custom Input

Compile & Run

Submit