**Lowest Common Ancestor in BST**

**Easy**

**30**

**The lowest common ancestor of two nodes p and q is the lowest node in the binary search tree that has both p and q as its descendants. A node is also considered a descendant of itself.**

**Given the root node and two nodes p and q in a binary search tree, return their lowest common ancestor.**

**Note: You can assume that p and q will be present in the tree.**

**A diagram of a network

Description automatically generated**

**Testing**

**Input Format**

**The first line contains an integer *T* denoting the number of test cases.**

**For each test case, the input has 3 lines:**

* **The first line contains an integer *n* denoting the number of nodes in the tree (including the NULL nodes).**
* **The second line contains *n* space-separated integers that will form the binary tree. The integers follow level order traversal of the tree where -1 indicates a NULL node.**
* **The second line contains *n* space-separated integers that will form the binary tree. The integers follow level order traversal of the tree where -1 indicates a NULL node.**
* **The third line contains 2 space-separated integers denoting the 0-based index of p and q in the above list.**

**Output Format**

**For each test case, the output contains a line with the value of the lowest common ancestor for p and q.**

**Sample Input**

**4**

**9**

**2 1 3 -1 -1 -1 5 4 7**

**6 7**

**7**

**6 3 21 -1 -1 -1 89**

**0 6**

**12**

**8 3 9 -1 4 -1 10 -1 -1 -1 12 11**

**1 6**

**4**

**28 14 -1 11**

**0 3**

**Expected Output**

**5**

**6**

**8**

**28**