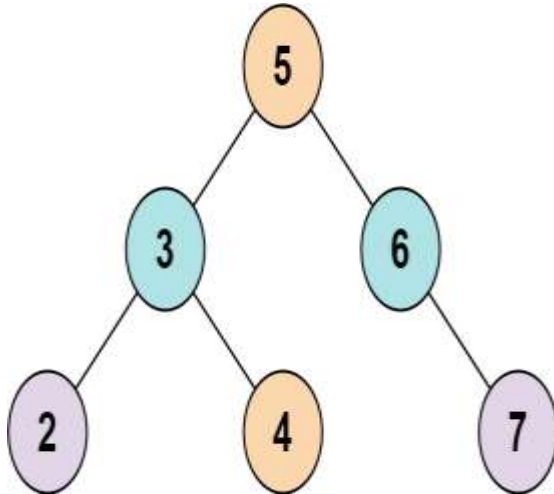


Two Sum IV - Input is a BST

Given the root of a binary search tree and an integer k , return true *if there exist two elements in the BST such that their sum is equal to k* , or false otherwise.

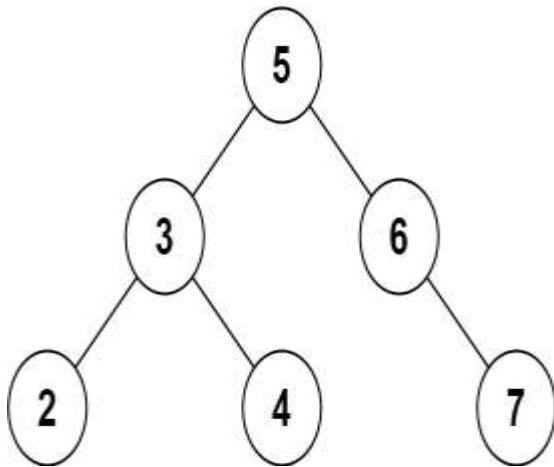
Example 1:



Input: root = [5,3,6,2,4,null,7], $k = 9$

Output: true

Example 2:



Input: root = [5,3,6,2,4,null,7], $k = 28$

Output: false

Constraints:

- The number of nodes in the tree is in the range $[1, 10^4]$.
- $-10^4 \leq \text{Node.val} \leq 10^4$
- root is guaranteed to be a **valid** binary search tree.
- $-10^5 \leq k \leq 10^5$