

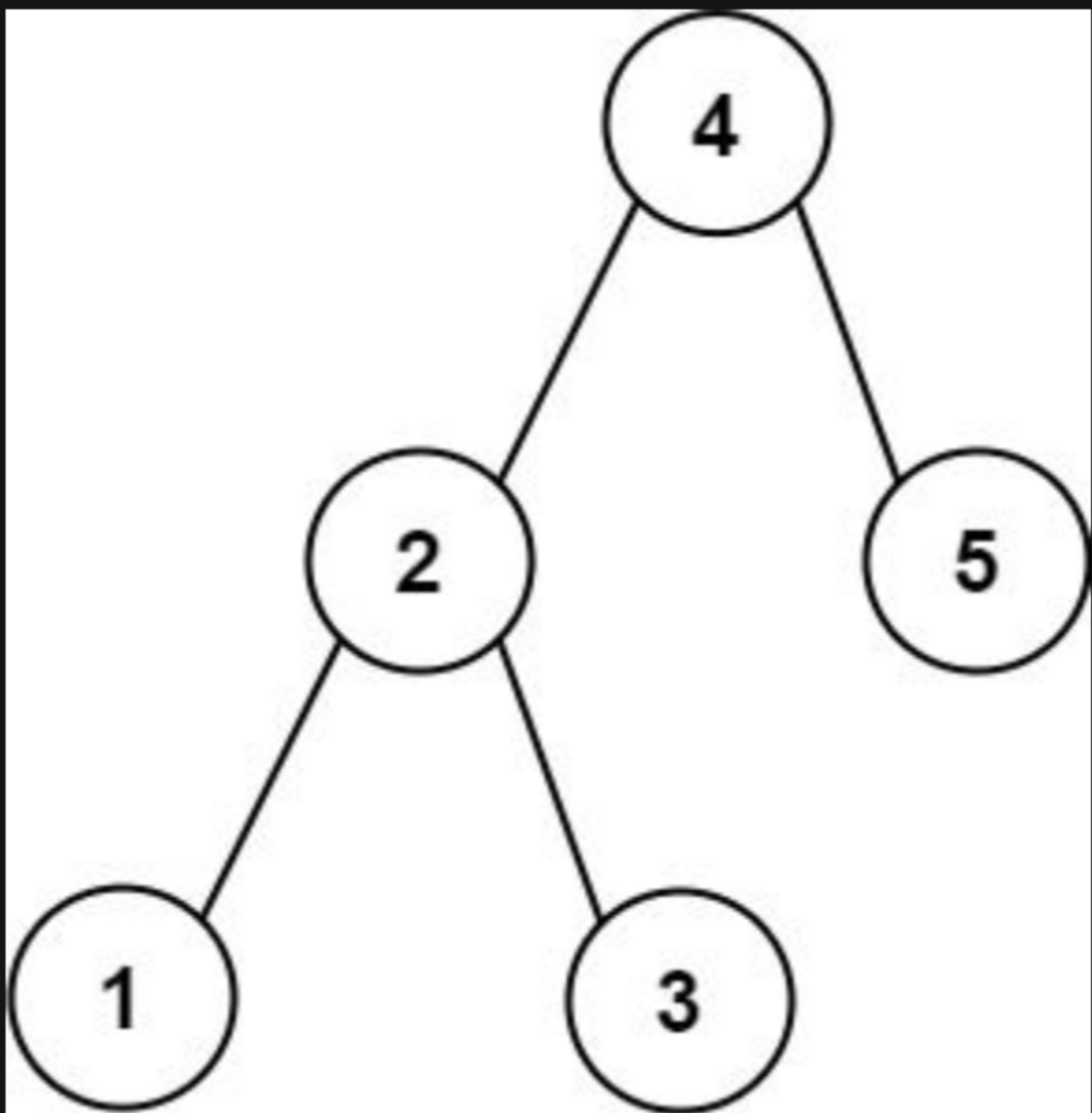
# 272. Closest Binary Search Tree Value II

## Description

Given the `root` of a binary search tree, a `target` value, and an integer `k`, return *the `k` values in the BST that are closest to the `target`*. You may return the answer in **any order**.

You are **guaranteed** to have only one unique set of `k` values in the BST that are closest to the `target`.

### Example 1:



**Input:** `root = [4,2,5,1,3]`, `target = 3.714286`, `k = 2`  
**Output:** `[4,3]`

### Example 2:

**Input:** `root = [1]`, `target = 0.000000`, `k = 1`  
**Output:** `[1]`

### Constraints:

- The number of nodes in the tree is `n`.
- `1 <= k <= n <= 104`.
- `0 <= Node.val <= 109`
- `-109 <= target <= 109`

**Follow up:** Assume that the BST is balanced. Could you solve it in less than `O(n)` runtime (where `n = total nodes`)?

