Top-20 Training Program (Binary Search Tree Problems)

Apply the solution building strategies discussed in class to solve following problems.

Group1

BST Balance Check: https://leetcode.com/problems/balanced-binary-tree/description/
BST Check: https://leetcode.com/problems/validate-binary-search-tree/description/
LCA in BST: https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/description/
Convert BST to Greater BST: https://leetcode.com/problems/convert-bst-to-greater-tree/description/
Delete Node in BST: https://leetcode.com/problems/delete-node-in-a-bst/description/
Mode in BST: https://leetcode.com/problems/find-mode-in-binary-search-tree/description/

Group2

Recover BST: https://leetcode.com/problems/recover-binary-search-tree/description/
Two Sum in BST: https://leetcode.com/problems/two-sum-iv-input-is-a-bst/description/
Trim BST: https://leetcode.com/problems/trim-a-binary-search-tree/description/
SerDe of BST: https://leetcode.com/problems/serialize-and-deserialize-bst/description/
Kth Smallest in BST: https://leetcode.com/problems/kth-smallest-element-in-a-bst/description/

Group3

Min Distance between BST nodes: https://leetcode.com/problems/minimum-distance-between-bst-nodes/description/
Min Absolute difference between BST nodes https://leetcode.com/problems/minimum-absolute-difference-in-bst/description/
Sorted Array to BST: https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree/description/
Sorted List to BST: https://leetcode.com/problems/convert-sorted-list-to-binary-search-tree/description/
BST Iterator: https://leetcode.com/problems/binary-search-tree-iterator/description/

Group4

BST Range Search: Given two values k1 and k2 (where k1 < k2) and a root pointer to a Binary Search Tree. Find all the keys of tree in range k1 to k2. i.e. print all x such that k1<=x<=k2 and x is a key of given BST. Return all the keys in ascending order.

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Floor & Ceil: Find an efficient algorithm to compute the floor and ceil of given element in a BST. Floor(x) refers to maximum element that is smaller than x. Ceil(x) refers to minimum element that is higher than x.