

Displaying Nodes in a Binary Search Tree

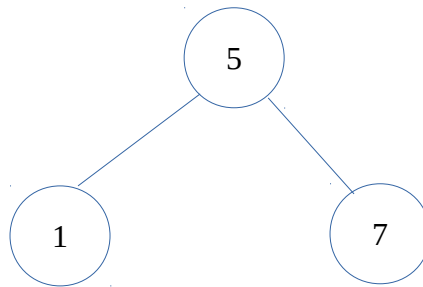
1. How to display nodes in a Binary Search Tree ?

- To display nodes, traverse a Binary Search Tree using In-order Traversal

2. What is In-order Traversal?

- Visit the nodes of a BST in the following order:
 1. visit the left child
 2. visit the root node
 3. visit the right child

For example: In the BST below,



In-order traversal: 1, 5, 7

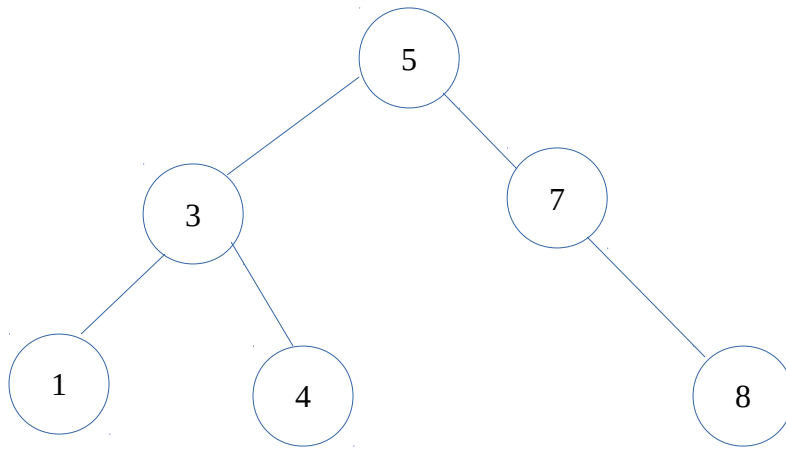
left child → root node → right child

3. How to apply In-order traversal to a large BST?

- Traverse the BST using the sequence below:
 1. traverse the left sub-tree (left child → root node → right child)
 2. visit the root node
 3. traverse the right sub-tree (left child → root node → right child)

- Traverse each sub-tree using In-order traversal (left child → root node → right child)

For example: In the BST below,



In-order Traversal: 1, 3, 4, 5, 7, 8