## Checklist

	Date	Task
<b>✓</b>	1st March 2022	Coded the insert and search method
$\checkmark$	2nd March 2022	Made the in-order, delete and kth smallest element code.
	3rd March 2022	Coded the tests and demonstration updated the logbook. Extra credit AVL tree implementation

## **Logbook notes**

Before March 1 2022: made some snippets of code here and there for the project. Read through the guidelines and instructions and made a rough implementation and logic guide for the project.

March 1 2022: Made a node class and and a BST class. Added some code in both the classes. Made an interface called GenericTrees

March 2 2022: Made all the methods for the BST class. Made a helper node class .Since the node class is nested inside the BST class it does't need to take any generics. Updated the logbook

## CSDS 233 Logbook

- Checklist
- Notes

## Parv Bhardwaj

Implementing a BST tree from scratch

void insert(T key, V value) – inserts a node containing key with associated value in the BST

- V search(T key) searches for a node with a specific key in the BST. In the case where a tree contains
- duplicates, search returns the first node encountered.
- void delete(T key) deletes a node containing key from the BST if it exists
- List<V> inorderRec() returns a list of values in inorder traversal of the BST implemented using recursion
- V kthSmallest(int k) find the kth smallest element in the BST