

University of Engineering and Management (UEM), Kolkata

Department of Computer Applications

<u>Stream: MCA</u>

Session: 2023-2025

Subject Name: Advanced Data Structures with C Laboratory

Subject Code: MCACC294

Class taken by:
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Topic: To implement Binary Search Tree (BST) in terms of Creation, Insertion

- 1. Write a C program to create a binary search tree using recursive function and display that.
- 2. Write a C program to create a binary search tree using non-recursive function and display that.
- 3. Write a C program to insert (by using a function) a specific element into an existing binary search tree and then display that.
- 4. Write a C program to search an element in a BST and show the result.
- 5. Write a C program to take user name as input and display the sorted sequence of characters using BST.
- 6. Write a C program to sort a given set of integers using BST.
- 7. Write a C program to display a BST using In-order, Pre-order, Post-order.
- 8. Write a C program to Count the number of nodes present in an existing BST and display the highest element present in the BST.
- 9. Write a C program to prove that binary search tree is better than binary tree.