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**Lab-XI**  
**National Institute of Technology Silchar**  
**Date: 13 November 2023**

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Subject Code: CS-201  
Semester: 3<sup>rd</sup>  
Course: B.Tech

Subject: Data Structures  
Department: CSE  
Section: A

*You have to write the time complexities and space complexities in the lab copies for all questions.*

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1. Write a program to perform the following operations using recursion-
  - (a) Inorder traversal
  - (b) Preorder traversal
  - (c) Postorder traversal
2. Write a program to perform the following operations without using recursion-
  - (a) Inorder traversal
  - (b) Preorder traversal
  - (c) Postorder traversal
3. Write a program to perform level order traversal of a binary tree.
4. Write a program to perform a zig-zag traversal of a binary tree.
5. Write a program to perform the Morris traversal on a binary tree.