

**Institute of Information Technology**  
**Noakhali Science and Technology University**  
**Software Engineering Program**  
**Course Title: CSE1202 Course Code: Data Structure Lab**  
**Stack Queue and Recursion Problem List**

**Queue Problem List:**

1. Write a C Program for Queue Introduction and Array Implementation
2. Write a C program to implement the Circular Queue
3. Write a C Program for Linked List Implementation of Queue
4. Write a C Program for Implement Queue using Stacks
5. Write a C Program for Check whether a given Binary Tree is Complete or not

**Stack Problem List:**

1. Write a C Program for Introduction to Stack
2. Write a C Program for Infix to Postfix Conversion using Stack
3. Write a C Program for Reverse a String using Stack
4. Write a C Program for Implement two stacks in an array
5. Write a C Program for Check for balanced parentheses in an expression
6. Write a C Program for Reverse a stack using recursion
7. Write a C Program for Implement Stack using Queues
8. Write a C Program for Design a stack with operations on middle element
9. Write a C Program for quick sort using two stack

**Recursion Problem List:**

1. Write a program to find out the value of  $n!$
2. Write a code to implement the Fibonacci sequence algorithm