List of Experiments

CA6234: DATA STRUCTURES AND ALGORITHMS LAB

Session: Jan- May 2025 | Faculty: Dr. Pramod Kumar Soni & Dr. Arpana Sinhal | Class: MCA- Sem II

[1] WAP to implement singly link list
[2] WAP to implement circular link list
[3] WAP to implement doubly link list
[4] WAP to implement stack using arrays
[5] WAP to implement Stack using link list
[6] WAP to implement Queues using arrays.
[7] WAP to implement Queues using link list
[8] WAP to implement Circular queue.
[9] WAP to Evaluate the postfix expression.
[10] WAO to convert an infix operation into a postfix operation.
[11] Understand and implement the concept of stacks for solving problems.
[12] WAP to implement the following searching techniques
   a. Binary search
   b. Linear search

[13] WAP a program to implement bubble sort and selection sort algorithm.
[14] WAP a program to implement the concept of divide and conquer.
   a. Strasens's Matrix Multiplication
   b. Merge Sort.
   c. Quick Sort
[15] Implement the concept of trees (BST insertion and Deletion)
[16] WAP to Demonstrate the concept of the Greedy approach (Anyone)
   - Minimum Spanning Tree,
   - Job Sequencing with deadlines
   - Dijkstra shortest path Algorithm
[17] Demonstrate the concept of Dynamic Programming (Any one)
   - 0/1 Knapsack
   - Matrix chain multiplication