

DATA STRUCTURES AND ALGORITHMS

LAB SYLLABUS

Module 1: Stack Data Structure and Applications

- Implementation of Stack
- Applications of Stack

Module 2: Queue Data Structure and Applications

- Implementation of Queue
- Applications of Queue

Module 3: Linked List and Applications

- Implementation of Linked List
- Applications of Linked List

Module 4: Searching Algorithms

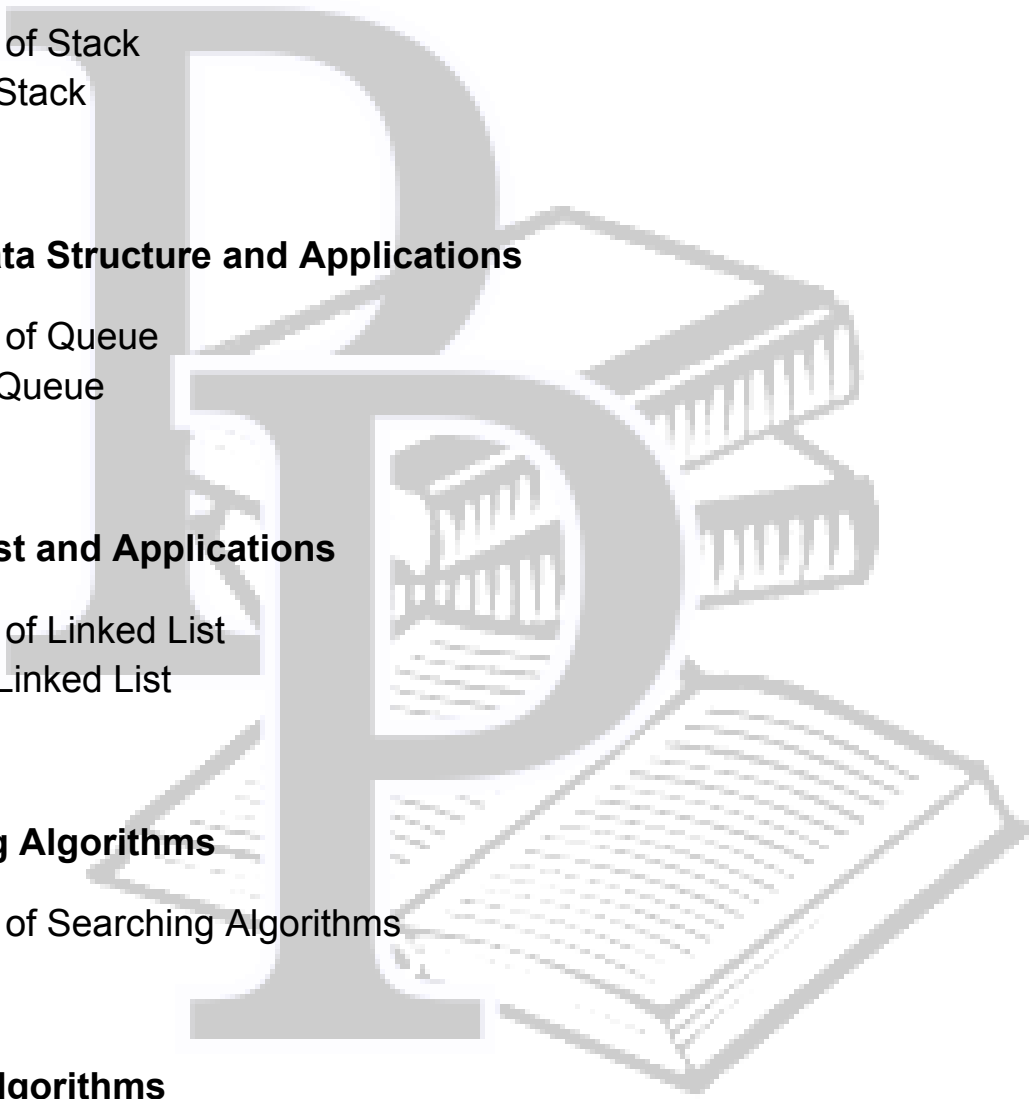
- Implementation of Searching Algorithms

Module 5: Sorting Algorithms

- Implementation of Sorting Algorithms

Module 6: Binary Tree Traversal

- Implementation of Binary Tree Traversal



Module 7: Binary Search Tree

- Implementation of Binary Search Tree

Module 8: Graph Traversal

- Depth First Search (DFS) Algorithm
- Breadth First Search (BFS) Algorithm

Module 9: Minimum Spanning Tree

- Prim's Algorithm
- Kruskal's Algorithm

Module 10: Single Source Shortest Path

- Dijkstra's Algorithm



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