DSAL Titles

A1: Implementing a Telephone Book Database with Hash Table and Comparing Collision Handling Techniques Based on Number of Comparisons.

A2: Designing an Abstract Data Type (ADT) for Sets with Operations such as Add, Remove, Contains, Size, Intersection, Union, Difference, and Subset.

B1: Constructing a Tree Representation for Book Chapters, Sections, and Subsections, with Analysis of Time and Space Complexity.

B2: Building and Manipulating a Binary Search Tree: Insertion, Longest Path, Minimum Value, Role Swapping, and Search Operations.

B3: Converting a Binary Tree to a Threaded Binary Tree and Analyzing Complexity.

C1: Modeling Flight Paths Between Cities Using Graph Representation and Analyzing Connectivity.

C2: Optimizing Office Connectivity with Minimum Cost Using Graph Data Structures.

D1: Constructing an Optimal Binary Search Tree Based on Access Probabilities for Sorted Keys.

D2: Implementing a Height-Balanced Tree Dictionary with CRUD Operations, Sorting, and Complexity Analysis for Keyword Retrieval

E1: Designing a Priority Queue System for Hospital Services Catering to Various Patient Categories.

F1: Creating a Student Information Management System Using Sequential File Operations.

F2: Building an Employee Information Management System with Index Sequential File Operations.