

Advanced Data Structures (CET2001B)

I N D E X

Sr. No.	Title of Experiment	Page No	Date of Performance	Signature of Batch I/C
1	Implement following polynomial operations using Circular Linked List: Create, Display, Addition and Evaluation			
2	Implement binary tree using C++ and perform following operations: Creation of binary tree and traversal (recursive and non- recursive)			
3	Implement dictionary using binary search tree where dictionary stores keywords & its meanings. Perform following operations: i. Insert a keyword ii. Delete a keyword iii. Create mirror image and display level wise iv. Copy			
4	Implement threaded binary tree and perform inorder traversal.			
5	Consider a friend's network on Facebook social web site. Model it as a graph to represent each node as a user and a link to represent the friend relationship between them using adjacency list representation and perform DFS & BFS traversals.			
6	A business house has several offices in different countries; they want to lease phone lines to connect them with each other and the phone company charges different rent to connect different pairs of cities. Business house wants to connect all its offices with a minimum total cost. Solve the problem using Prim's algorithm.			
7	Read the marks obtained by students of second year in an online examination of particular subject. Find out maximum and minimum marks obtained in that subject. Use heap data structure and heap sort.			
8	Implement Direct access file using hashing (linear probing with and without replacement) perform following operations on it: 1. Create Database 2. Display Database 3. Add a record 4. Search a record 5. Modify a record			
9	A Dictionary stores keywords and its meaning. Provide facility for adding new keywords, deleting keywords, updating values of any entry. Provide facility to display whole data sorted in ascending/ Descending order. Also find how many maximum comparisons may require for finding any keyword. Use Height balance tree and find the complexity for finding a keyword.			

Certificate

This is to certify that Mr. / Ms. _____ of class S. Y. B. Tech. Computer Science and Engineering, Division _____ Roll No. _____ has completed the laboratory work in the subject Advanced Data Structures (CET2001B) during the Trimester-VI of the Academic Year 2022-23.