Design and Analysis of Algorithms Lab

SEM – 5 ACADEMIC YEAR 2024-25

Sr. No	LAB NO	Name OF Topic
1	1	Implementation and Time analysis of Bubble, Selection and Insertion sorting algorithms for best case, average case & worst case.
2	2	Implementation and Time analysis of Max-Heap sort algorithm.
3	3	Implementation and Time analysis of Merge Sort algorithms for Best case, Average case & Worst-case using Divide and Conquer.
4	4	Implementation and Time analysis of Quick-Sort algorithms for Best case, Average case & Worst-case using Divide and Conquer.
5	5	Write a program to solve fractional knapsack problem.
6	6	Implementation and Time analysis of Krushkal's Minimum spanning Tree algorithms.
7	7	Implementation and Time analysis of Prim's Minimum spanning Tree algorithms.
8	8	Write a program to solve 0-1 knapsack problem.
9	9	Implementation and Time analysis of Depth First Search (DFS) Graph Traversal and Breadth First Traversal (BFS) Graph Traversal.