THADOMAL SHAHANI ENGINEERING COLLEGE

List of Experiments

Subject: Analysis of Algorithm Lab **Subject Code: CSL401**

Branch: Computer **Semester: IV**

S. No.	Name of Experiments
1.	Implement a) Selection Sort b) Insertion Sort
2.	Divide and Conquer Approach – Implement a) Merge Sort b) Quick Sort
3.	Greedy Method Approach – Implement Minimum Cost Spanning Tree using Kruskal's Algorithm **OR** Prim's Algorithm
4.	Greedy Method Approach – Implement Fractional Knapsack problem.
5.	Dynamic Programming Approach – Implement Longest Common Subsequence Problem.
6.	Dynamic Programming Approach – Implement Single source shortest path algorithm (Bellman Ford Algorithm).
7.	Backtracking Approach – Implement N – Queen Problem
8.	Backtracking Approach – Implement Sum of Subset Problem
9.	Branch and Bound Approach – Implement 15 Puzzle Problem
10.	String Matching Algorithms – Implement the Rabin Karp Algorithm **OR** the Knuth-Morris-Pratt Algorithm
11.	Identify a problem and an efficient algorithmic strategy which will be used to solve the problem (Selected problem should not be the part of syllabus)

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