

**Name of the Course: Design & Analysis Algorithm Lab (Course Code: PCC-CS494), 2020**

1. Write a C Program to implement Binary Search using Divide and Conquer approach.
2. Write a C Program to implement Merge Sort using Divide and Conquer approach.
3. Write a C Program to implement Quick Sort using Divide and Conquer approach.
4. Write a C Program to find Maximum and Minimum element from an Array of integers using Divide and Conquer approach.
5. Write a C Program to find the minimum number of scalar multiplication needed for chain of matrix.
6. Write a C Program to implement All Pairs Shortest Path for a graph (Floyed- Warshall algorithm)
7. Write a C Program to implement Traveling Salesman Problem
8. Write a C Program to implement Single Pair Shortest Path for a graph (Dijkstra, Bellman Ford algorithm).
9. Write a C Program to solve 15 Puzzle Problem using Brunch and Bound approach.
10. Write a C Program to solve Implement 8 Queen problem using Backtracking approach.
11. Write a C Program to solve Graph Colouring problem using Backtracking approach.
12. Write a C Program to solve Hamiltonian Problem using Backtracking approach.
13. Write a C Program to solve Knapsack Problem using Greedy Approach.
14. Write a C Program to solve Job Sequencing Problem with deadlines using Greedy Approach.
15. Write a C Program to find MST using Prim's Algorithm
16. Write a C Program to find MST using Kruskal's Algorithm
17. Write a C Program to implement BFS
18. Write a C Program to implement DFS