1. Write a program for finding the maximum & minimum using divide and Conquer design approach.

2. Using divide and conquer algorithm design approach, write a program to implement Merge sort

3. Using divide and conquer algorithm design approach, write a program to implement Quicksort

4. Using divide and conquer algorithm design approach, write a program to implement Multiplication of Long Integers

5. Using divide and conquer algorithm design approach, write a program to implement Strassen's matrix multiplication

6. Using Greedy approach for algorithm design, write a program to implement Optimal storage of tapes

7. Using Greedy approach for algorithm design, write a program to implement Fractional Knapsack problem

8. Using Greedy approach for algorithm design, write a program to implement Job Scheduling problem

9. Using Greedy approach for algorithm design, write a program to implement Subset cover problem

10. Using Greedy approach for algorithm design, write a program to implement Container loading problem

11. Using Greedy approach for algorithm design, write a program to implement Coin changing problem

12. Using Greedy approach for algorithm design, write a program to implement MST using Kruskal's algorithm

13. Using Greedy approach for algorithm design, write a program to implement Dijkstra's Algorithm

14. Using Dynamic Programming for algorithm design, write a program to Compute binomial coefficients

15. Using Dynamic Programming for algorithm design, write a program to implement Coin Changing problem to determine the minimum number of coins to make a given amount

16. Using Dynamic Programming for algorithm design, write a program to implement Matrix Chain Multiplication and evaluate optimal ordering of multiplication.

17. Using Dynamic Programming for algorithm design, write a program to implement 0/1-Knapsack

18. Using Dynamic Programming for algorithm design, write a program to implement Johnson's Algorithm of flow shop scheduling for 2 machines scenarios

19. Using Dynamic Programming for algorithm design, write a program to implement Johnson's Algorithm of flow shop scheduling for 3 machines scenarios

20. Using Dynamic Programming for algorithm design, write a program to evaluate Longest Common Subsequence

21. Using Dynamic Programming for algorithm design, write a program to implement shortest path in Multistage graphs

22. Using backtracking approach for algorithm design, write a program to implement N–queen problem

23. Using backtracking approach for algorithm design, write a program to implement Sum of subsets

24. Using backtracking approach for algorithm design, write a program to implement Knapsack problem

25. Using backtracking approach for algorithm design, write a program to implement Generating permutation

26. Using backtracking approach for algorithm design, write a program to implement Graph coloring so that no pair of adjacent vertices have the same color.

27. Using the backtracking approach for algorithm design, write a program to evaluate Hamiltonian cycle in graph

28. Using branch and bound approach for algorithm design, write a program to implement 15-puzzle problem

29. Using branch and bound approach for algorithm design, write a program to implement LC Branch-and-bound job sequencing problem

30. Using branch and bound approach for algorithm design, write a program to implement LC branch and bound algorithm for 0/1-Knapsack problem