



SAVEETHA SCHOOL OF ENGINEERING
SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL
SCIENCES



CSA06 – DESIGN AND ANALYSIS OF ALGORITHMS

List of Experiments

1. Write a program to Print Fibonacci Series using recursion.
2. Write a program to check the given no is Armstrong or not. .
3. Write a program to find the GCD of two numbers .
4. Write a program to get the largest element of an array.
5. Write a program to find the Factorial of a number .
6. Write a program to check a number is a prime number or not .
7. Write a program to perform Selection sort.
8. Write a program to perform Bubble sort
9. Write a program for to multiply two Matrix
10. Write a program for to check whether a given String is Palindrome or not
11. Write a program for to copy one string to another
12. Write a Program to perform binary search.
13. Write a program to print the reverse of a string
14. Write a program to find the length of a string.
15. Write a program to perform Strassen's Matrix Multiplication.
16. Write a program to perform Merge Sort.
17. Using Divide and Conquer strategy to find Max and Min value in the list.
18. Write a program to generate all the prime numbers.
19. Write a program to perform Knapsack problem using greedy techniques.
20. Write a program to perform MST using greedy techniques.
21. Using Dynamic programming concept to find out Optimal binary search tree.
22. Using Dynamic programming techniques to find binomial coefficient of a given number
23. Write a program to find the reverse of a given number.
24. Write a program to find the perfect number.
25. Write a program to perform travelling salesman problem using dynamic programming
26. Write a program for the given pattern

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If n=4          1
                1 2
                1 2 3
                1 2 3 4
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27. Write a program to perform Floyd's algorithm
28. Write a program for pascal triangle.
29. Write a program to find the optimal cost by using appropriate algorithm
30. Write a program to find the sum of digits.

31. Write a program to print a minimum and maximum value sequence for all the numbers in a list.
32. Write a program to perform n Queens problem using backtracking.
33. Write a program to insert a number in a list.
34. Write a program to perform sum of subsets problem using backtracking.
35. Write a program to perform graph coloring problem using backtracking.
36. Write a program to compute container loader Problem.
37. Write a program to generate the list of all factors for n value.
38. Write a program to perform Assignment problem using branch and bound.
39. Write a program for to perform linear search.
40. Write a program to find out Hamiltonian circuit Using backtracking method