**List of Programs to be submitted as a part of Continuous Assessment for Design and Analysis of Algorithms Course**

1. A program to measure time taken by a program (Recursive as well as Iterative)
2. Josephus Problem
3. Given a sequence of n non-sorted integers find the two missing numbers.
4. Under Divide and Conquer Strategy implement and compare the time complexities of the following:

* Binary Search
* Insertion Sort
* Merge Sort
* Quicksort
* Heap Sort
* Strassen’s Matrix Multiplication

1. Using Greedy Strategy implement the following:

* Job Sequencing with Deadlines
* Optimal Merge Patterns
* Huffman Coding

1. Using Dynamic Programming Tabulation and Memoization methods implement the following:
   * Longest Common Subsequence Problem
   * Matrix Chain Multiplication
   * All Pairs Shortest Path
2. Backtracking:
   * N Queens problem
   * Graph coloring Problem
   * Hamiltonian Cycles Problem backtracking
   * Sum of Subsets Problem
3. Branch and Bound Strategy to be implemented for the following:

* 0/1 Knapsack Problem
* Travelling Salesman Problem