DAA Lab Programs

Part 1

1. Java program that prompts the user to enter a positive integer N and calculates the factorial of that number using a loop.
2. Java program to print the Fibonacci series up to a given number
3. Java program to check whether the given element is present or not in the array of elements using linear search.
4. Java program to implement the selection sort algorithm by using the Brute Force Technique.
5. Java program to sort the given array of elements using Bubble Sort.
6. Java program to sort a given set of elements using the Merge Sort method.
7. Java program to sort a given set of elements using the Quick sort method.
8. Java program in order to implement the binary search.
9. Java program to find the maximum and minimum using the divide and conquer technique.
10. Java program to implement the Coin-changing problem by using the greedy method.
11. Java program to implement the Fractional Knapsack problem using Greedy method.
12. Java program to implement the Job Sequence problem using the Greedy method.

Part 2

1. Implement Prim's algorithm which generates minimum spanning tree using greedy approach.
2. Implement Kruskal's algorithm which generates minimum spanning tree using greedy approach
3. Dijkstra's Algorithm to find shortest paths
4. Floyd's Algorithm
5. Warshall's Algorithm
6. 0/1 Knapsack using Dynamic Programming
7. Travelling Salesperson using Dynamic Programming
8. Design and implement a Java program to find all Hamiltonian Cycles
9. Bellman ford Algorithm Implementation
10. Implementation of N Queen using Backtracking
11. Sum of Subset Problem