

- 1. Implement depth first search algorithm. Use an undirected graph and develop a recursive algorithm for searching all the vertices of a graph or tree data structure.**
- 2. Implement Breadth First Search algorithm. Use an undirected graph and develop a recursive algorithm for searching all the vertices of a graph or tree data structure.**
- 3. Implement Greedy search algorithm for Selection Sort.**
- 4. Implement Greedy search algorithm for Minimum Spanning Tree.**
- 5. Implement Greedy search algorithm for Single-Source Shortest Path Problem.**
- 6. Implement Greedy search algorithm for Job Scheduling Problem.**
- 7. Implement Greedy search algorithm for Prim's Minimal Spanning Tree Algorithm.**
- 8. Implement Greedy search algorithm for Kruskal's Minimal Spanning Tree Algorithm.**
- 9. Implement Greedy search algorithm for Dijkstra's Minimal Spanning Tree Algorithm.**
- 10. Implement a solution for a Constraint Satisfaction Problem**

using Branch and Bound and Backtracking for n-queens problem or a graph coloring problem.

- 11. Develop an elementary Chabot for any suitable customer interaction application.**
- 12. Implement any one of the following Expert System.**
 - a. Information management**
 - b. Stock market trading**
- 13. Case study on Amazon EC2 and learn about Amazon EC2 web services.**
- 14. Installation and configure Google App Engine.**
- 15. Creating an Application in Salesforce.com using Apex programming Language.**
- 16. Consider a library, where a member can perform two operations: issue book and return it. A book is issued to a member only after verifying his credentials. Develop a use case diagram for the given library system by identifying the actors and use cases and associate the use cases with the actors by drawing a use case diagram. Use UML tool.**
- 17. Consider online shopping system. Perform the following tasks and draw the class diagram using UML tool. Represent the individual classes, and objects Add methods Represent**

relationships and other classifiers like interfaces

- 18. Consider the online shopping system. Draw the sequence diagram using UML tool to show message exchanges.**
- 19. Write a Java/C/C++/Python program to implement DES algorithm.**
- 20. Write a Java/C/C++/Python program to implement AES Algorithm.**