Lab Experiment: 11 **Batch: 1 & 2**
Subject: Data Structures Lab **MCA**
Semester: 1st

Objective:

To implement a graph traversal technique (Breadth-First Search or Depth-First Search) in C. This program will involve creating a graph using adjacency matrices and performing traversal on it.

Problem Statement:

Write a C program to implement graph traversal using Breadth-First Search (BFS) or Depth-First Search (DFS).

1. The program should allow the user to input the number of vertices and edges in the graph.
2. The adjacency matrix should be created based on the input.
3. Perform BFS or DFS starting from a user-defined source vertex and display the traversal order.

Assignment Tasks:

1. Input the graph's number of vertices and edges.
2. Create the graph using an adjacency matrix.
3. Implement one traversal technique (BFS or DFS).
4. Display the traversal order of the graph.

Instructions for Submission

1. Implement the above tasks in C, ensuring each function works as expected.
2. Document each step and observation.
3. Submit a PDF containing the following:
   - C Code: Include all implemented code sections.
   - Output Screenshots: Attach screenshots of the code output for each function.
   - Explanation: Provide explanations for each step of the code, including observations and results.