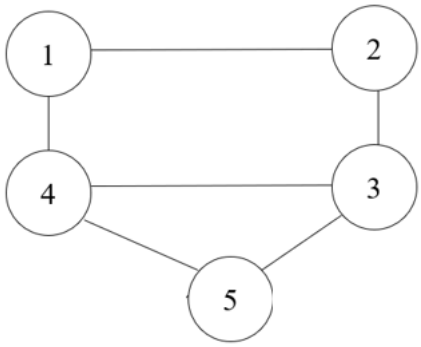

Objective:

In this programming assignment, you will work with a given graph represented by an adjacency matrix. Your task is to implement both Breadth-First Search (BFS) and Depth-First Search (DFS) traversals on this graph.

Instructions:

Part 1: Depth-First Search (DFS)

- You will be provided with an adjacency matrix representing a graph.
- Implement a function dfs(adjacency_matrix, start_node) that performs a Depth-First Search traversal starting from the given start_node.
- The function should return a list of nodes visited in the order they were visited during the traversal.
- Ensure that the algorithm handles cycles gracefully and doesn't get stuck in infinite loops.

Part 2: Breadth-First Search (BFS)

- Implement a function bfs(adjacency_matrix, start_node) that performs a Breadth-First Search traversal starting from the given start_node.
- The function should return a list of nodes visited in the order they were visited during the traversal.
- Like in the DFS part, make sure the BFS traversal handles cycles properly.