Assignment1: Graph theory powered Sudoku solver

Objective

The objective of this assignment is to implement the Depth-First Search (DFS) algorithm on a graph represented using an adjacency list.

Task Description

- 1. Construct an adjacency list representation of the given graph.
- 2. Implement the DFS algorithm to traverse the graph starting from a vertex determined by the last digit of your roll number. Specifically, if the last digit of your roll number is i, start the DFS traversal from vertex i.

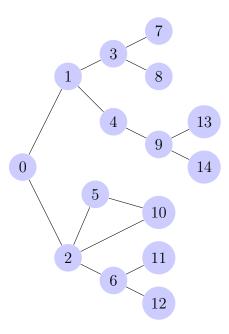
Example: If your roll number is 220425, you should start the DFS traversal from vertex 5.

3. Print the order of vertices visited during the DFS traversal.

Graph Representation

The graph is represented below. It consists of 15 vertices (0 to 14) with the following edges as shown in figure:

Graph Visualization



Submission

Submit the following via the provided Google Form:

• Source code file containing the implementation in a single .cpp file. (Make sure on running the code, it prints the dfs traversal)

The Google Form link : link