Lab Task

You need to implement Algorithm of Depth first Search

Code Provided:

Provided code file named graph.py contains skeleton code which defines **abstract class of graph** and inherited by implementation of graph with **Adjacency Matrix**. Size of matrix is equal to N * N where **N =** Number of Vertices in Graph.

Important Functions of Graph

def add_edge(self, v1, v2, weight=1): Add edge between 2 vertices

def get_adjacent_vertices(self, v): Get all adjacent vertices of current vertex

def get_indegree(self, v): Return degree (number of connected adjacent vertices) of vertex

Tasks to Perform:

1. Implement DFS function of file Graph to find path from source to destination
2. Recursively explore all paths from current vertex to destination vertex
3. Print solution (explored vertices) as you progress towards destination
4. Print “Solution Found” if you reach goal vertex