24. DFS (Depth-First Search)

def dfs(graph, start, goal, path=None, visited=None):

if path is None: path = [start]

if visited is None: visited = set()

visited.add(start)

if start == goal:

return path

for neighbor in graph[start]:

if neighbor not in visited:

result = dfs(graph, neighbor, goal, path + [neighbor], visited)

if result:

return result

return None

print("DFS Path:", dfs(graph, 'A', 'F'))