def dfs(visited, graph, node):

if node not in visited:

print (node)

visited.add(node)

for neighbour in graph[node]:

dfs(visited, graph, neighbour)

# Get the number of nodes from the user

num\_nodes = int(input("Enter the number of nodes: "))

# Create an empty graph

graph = {}

# Get the adjacency list for each node from the user

for i in range(num\_nodes):

node = input(f"Enter node {i+1}: ")

neighbours = input(f"Enter neighbours of {node} (space separated): ").split()

graph[node] = neighbours

# Get the starting node from the user

start\_node = input("Enter the starting node: ")

# Create a set to keep track of visited nodes

visited = set()

print("Following is the Depth-First Search")

dfs(visited, graph, start\_node)