**AI FOR LLM- CSA1704**

**8. Depth-First Search (DFS)**

**CODE:**

def dfs(graph, node, visited=None):

if visited is None:

visited = set()

if node not in visited:

print(node, end=" ")

visited.add(node)

for neighbor in graph[node]:

dfs(graph, neighbor, visited)

# Example graph as an adjacency list

graph = {

'A': ['B', 'C'],

'B': ['D', 'E'],

'C': ['F'],

'D': [],

'E': ['F'],

'F': []

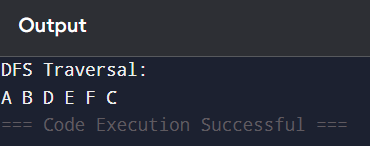
}

# Run DFS starting from node 'A'

print("DFS Traversal:")

dfs(graph, 'A')

**OUTPUT:**

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