Practical 1: DFS

Q1) Demonstrate DFS Algorithm

Ans:

dfs.py

"""

dfs.py

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Practical: 1

Objective: Demonstrate DFS Algorithm

"""

def dfsRecursive(graph, start, visited=None):

if visited is None:

visited = set()

visited.add(start)

print(start, end=" ")

for next in graph[start] - visited:

dfsRecursive(graph, next, visited)

return visited

big\_graph= {

"a": set(["k", "c", "l"]),

"b": set(["k", "j"]),

"c": set(["a"]),

"d": set(["k", "g"]),

"e": set(["j"]),

"f": set(["h", "i"]),

"g": set(["d", "f"]),

"h": set(["f"]),

"i": set(["f"]),

"j": set(["b", "e"]),

"k": set(["a", "b", "d"]),

"l": set(["a"]),

}

dfsRecursive(big\_graph, 'a')

print("\n")

