Practical 2: BFS

Q1) Demonstrate BFS Algorithm.

Ans:

bfs.py

"""

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Practical: 2

Objective: Demonstrate BFS Algorithm

"""

def bfs(visit\_complete, graph, current\_node):

visit\_complete.append(current\_node)

queue = []

queue.append(current\_node)

while queue:

s = queue.pop(0)

print(s)

for neighbour in graph[s]:

if neighbour not in visit\_complete:

visit\_complete.append(neighbour)

queue.append(neighbour)

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"]),

}

bfs([], big\_graph, 'a')

