graph = {

'A': [('B', 7), ('C', 4)],

'B': [('D', 7), ('E', 3)],

'C': [('F', 8), ('G', 2)],

'D': [],

'E': [('H', 0)],

'F': [('H', 0)],

'G': [('H', 0)],

'H': []

}

start = input("Enter the start node: ").strip().upper()

goal = input("Enter goal node: ").strip().upper()

def bfs(start, goal, graph):

Open = []

Close = []

Open.append((start, 0))

while Open:

Open.sort(key=lambda x: x[1])

node = Open.pop(0)

current = node[0]

if current == goal:

print(current)

return

if current not in Close:

print(current)

Close.append(current)

for x in graph[current]:

if x[0] not in [i[0] for i in Open]:

Open.append(x)

bfs(start, goal, graph)

OUTPUT:

