**Best first search**

**Input:**

graph = {

    'A':[('B', 12), ('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 start: ")

goal = input("Enter goal: ")

def bfs(start, goal, graph, open=[], close=[]):

    if start not in close:

        print(start)

        close.append(start)

        for x in graph[start]:

            if x[0][0] not in open:

                open.append(x)

    open.sort(key=lambda x:x[1])

    if open[0][0] == goal:

        print(open[0][0])

    else:

        node=open[0]

        open.remove(node)

        bfs(node[0], goal, graph, open, close)

bfs(start, goal, graph)

**Output:**

