Repeat:

1

pathtemp = copy.deepcopy(path)

2

len(pathtemp)>0

pathtemp.pop(0)

len(pathtemp)>0

3

4

pathtemp[0] == node

5

return true

pathtemp[0] != node

pathtemp.pop(0)

len(pathtemp)>0

6

len(pathtemp)<=0

return false

len(pathtemp)<=0

len(pathtemp)<=0

DFS

2

value=graph[key]

init i

3

Repeat(path,i) == False

path.append(i)

simplePath.append(copy.deepcopy(path))

path[0]!=i

4

DFS(copy.deepcopy(path),i)

1

i in value

5

path[0]==i

Repeat(path,i) == False

6

path.pop()

7

i not in value

i in value

Simplepath

key not in graph.keys()

3

1

init k

2

key in graph.keys()

path = []

path.pop()

DFS(copy.deepcopy(path),key)

simplePath.append(copy.deepcopy(path))

path.append(key)

return

key in graph.keys()

Primepath:

8

1

init path1

2

path1 in simplepath

flag = False

init path2

3

path2 in simplepath

4

path1 != path2&&

','.join(path1) in ','.join(path2)

flag = True

5

path2 not in simplepath

break

7

flag==True

primePath.append(

copy.deepcopy(path1))

6

flag==False

path1 in simplepath

path1 not in simplepath

path1 not in simplepath