

b)

```
G = {}
G['Chao'] = ['Anna', 'Latoya']
G['Anna'] = ['Chao', 'Latoya']
G['Latoya'] = ['Anna', 'Chao']
G['Deepak'] = ['Chao', 'Emma', 'Aisha', 'Greg']
G['Emma'] = ['Issac', 'Aisha', 'Deepak']
G['Issac'] = ['Emma', 'Aisha']
G['Aisha'] = ['Issac', 'Emma', 'Deepak']
G['Greg'] = ['Deepak', 'Juan', 'Hannah']
G['Juan'] = ['Greg', 'Hannah']
G['Hannah'] = ['Greg', 'Juan']
```

c)

Computer Network: In this case, the diameter of a graph represents the furthest distance of a direct connection between two computers.

Social Network: In this case, the diameter of a graph represents the furthest distance of a direct friend/relationship connection between two people. This could also be thought of as the most “degrees of separation” between two people, too.

d)

function header: pass in graph:

```
if graph is empty:
    return 0

vertices = graph.keys()
max = 0

for vertex in graph:
    for spot in graph:
        distance = distance between vertex and spot
        if distance > max:
            max = distance

return max
```

