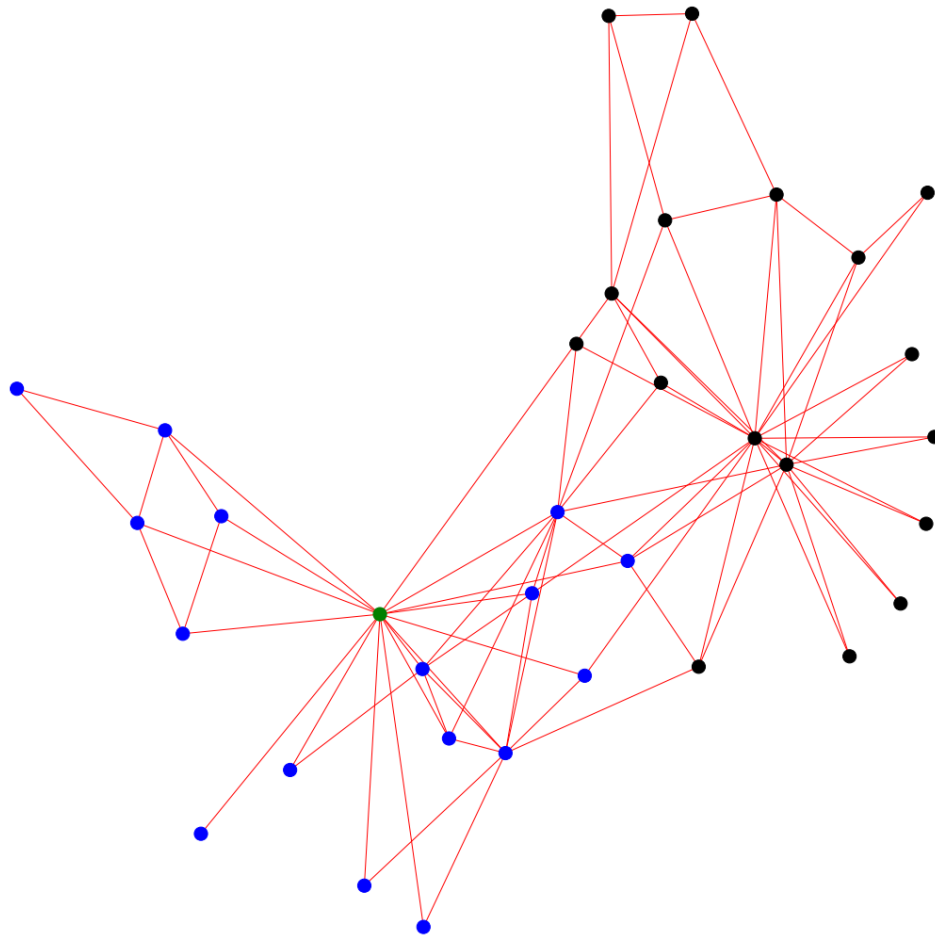


## Question 1:

**a**

blue nodes and black nodes represent people in different groups



**b**

The network is connected

**c**

Maximum degree is 17

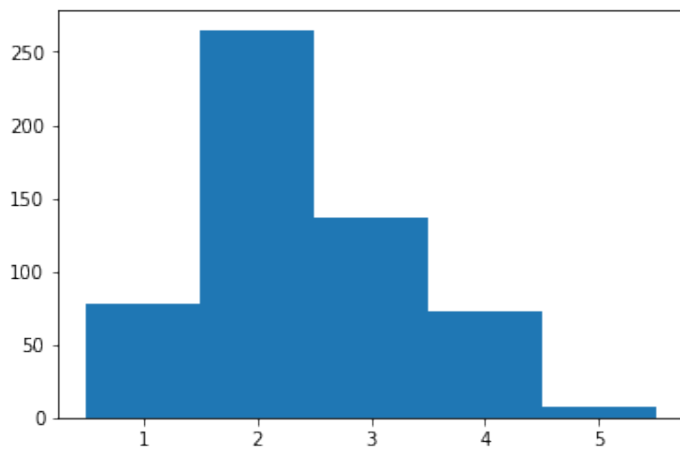
**d**

The diameter of the network is 5

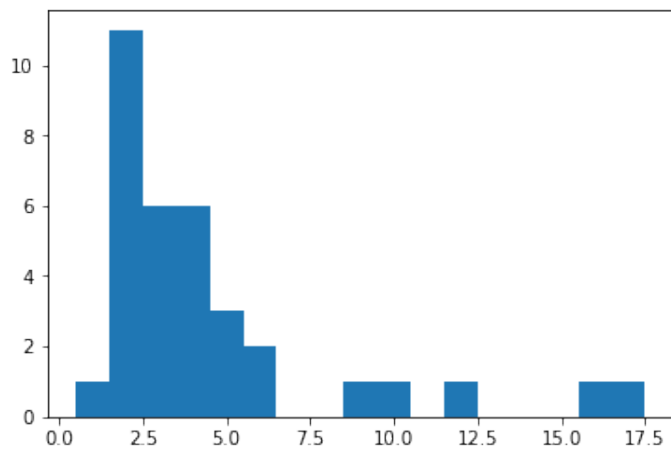
**e**

The clustering coefficient of the network 0.570(approximated to 3 decimal degrees)

**f**

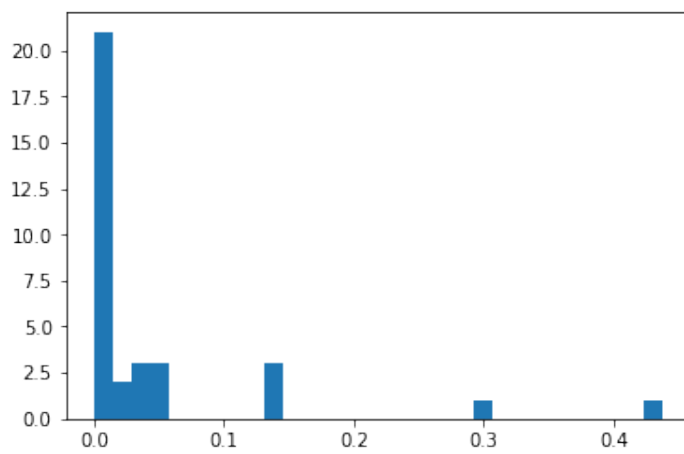


g

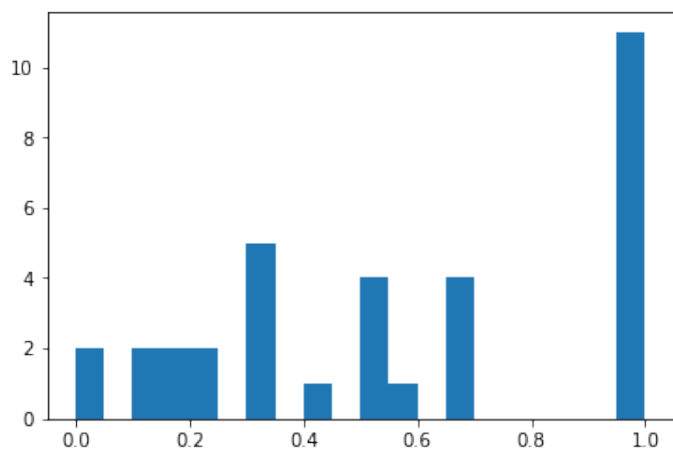


h

The most central node is colored green in the graph in question(b)

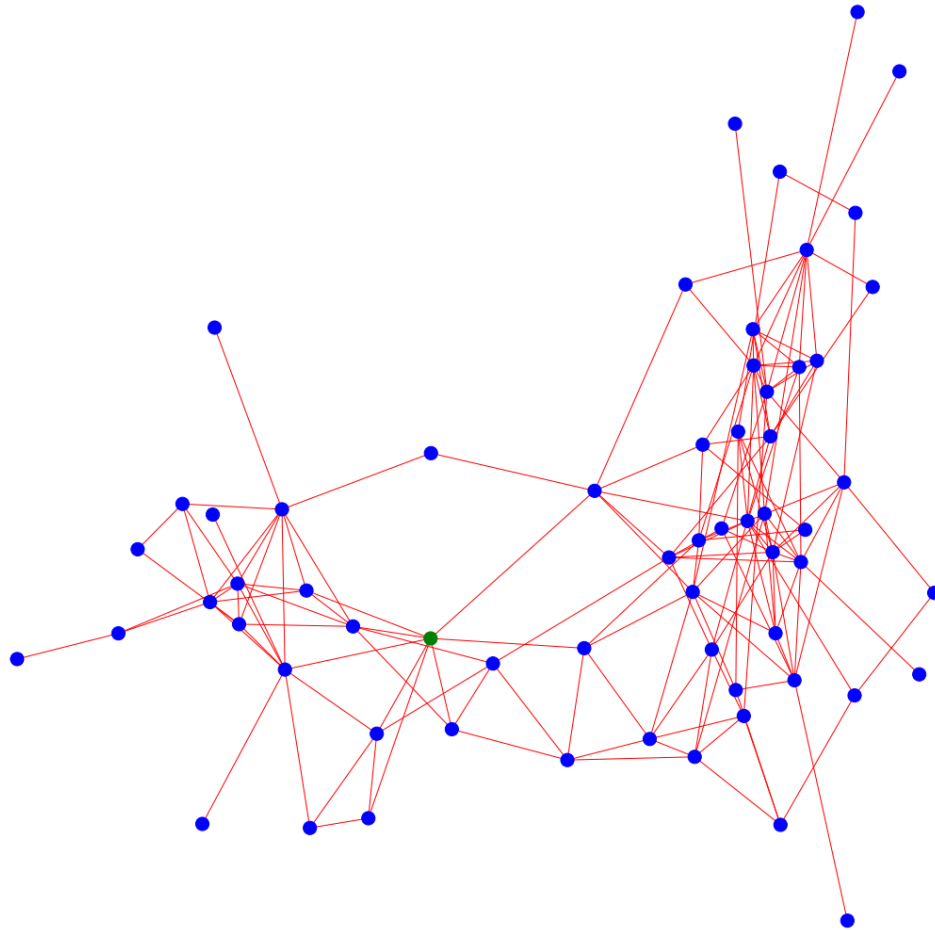


**i**



## Question 2:

a



**b**

The network is connected

**c**

Maximum degree is 12

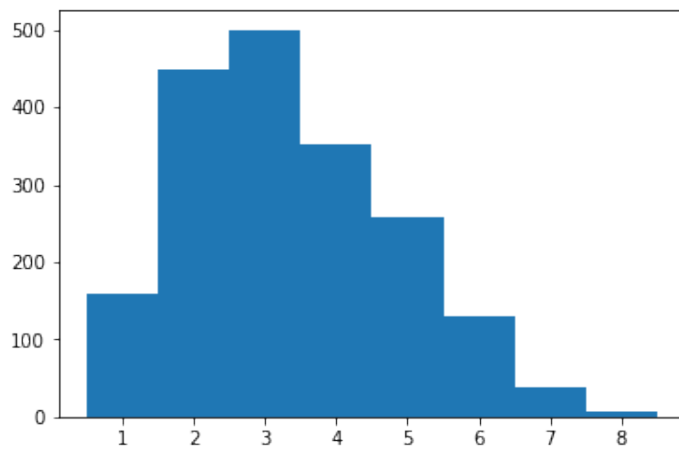
**d**

The diameter of the network is 8

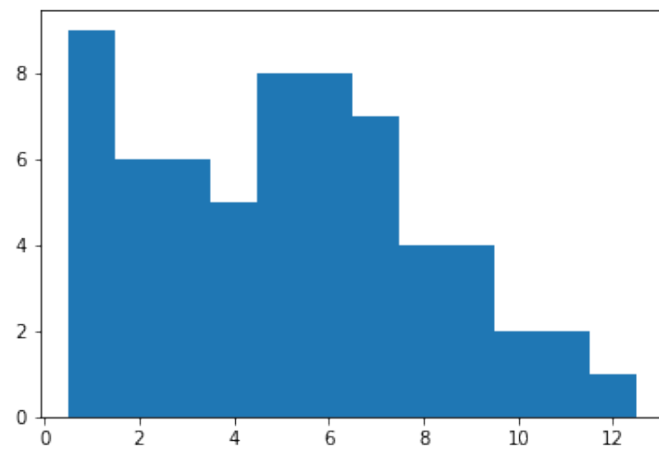
**e**

The clustering coefficient of the network 0.259(approximated to 3 decimal degrees)

**f**

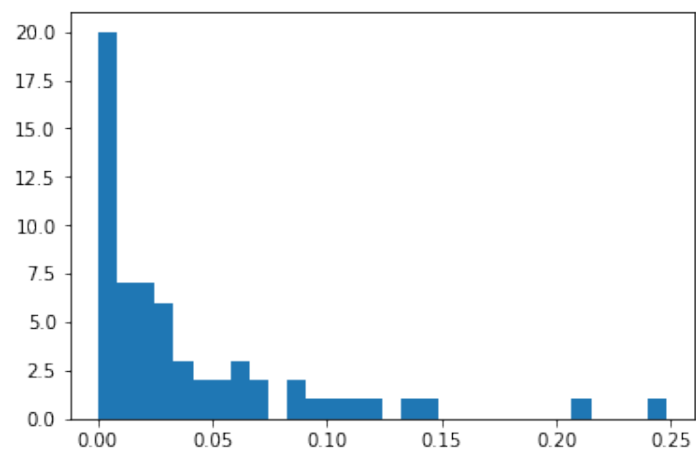


g

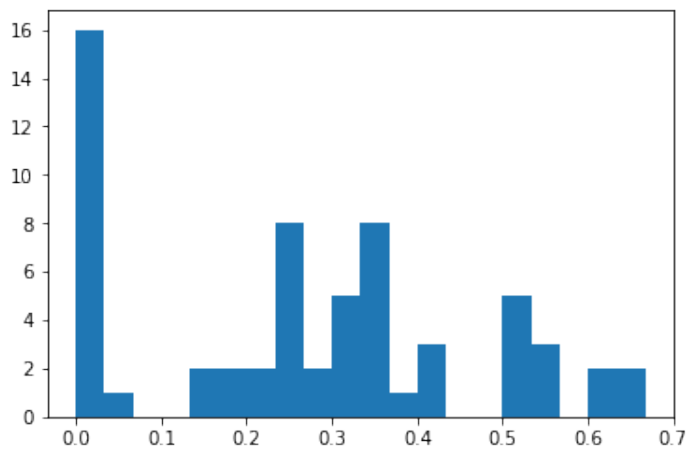


h

The most central node is colored green in the graph in question(b)



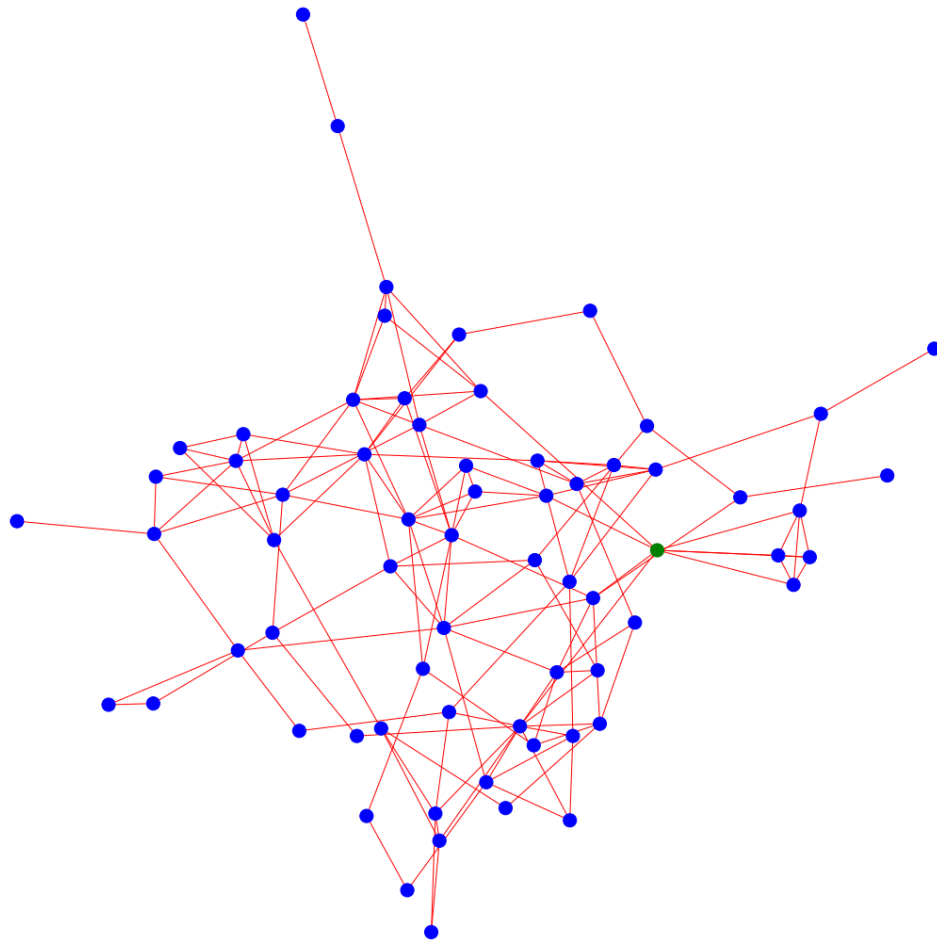
**i**





### Question 3:

a



**b**

The network is connected

**c**

Maximum degree is 11

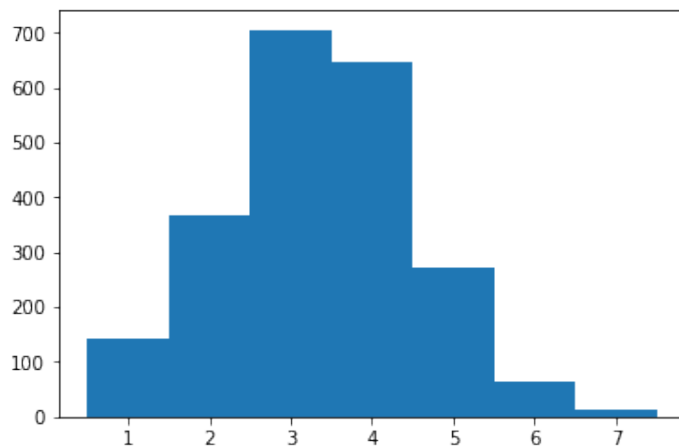
**d**

The diameter of the network is 7

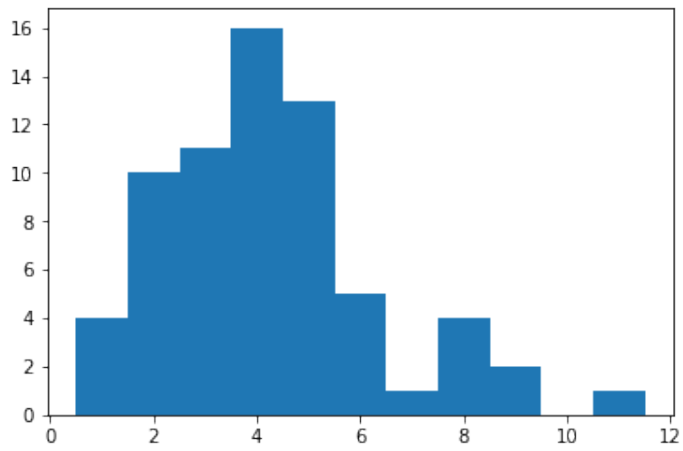
**e**

The clustering coefficient of the network 0.310(approximated to 3 decimal degrees)

**f**

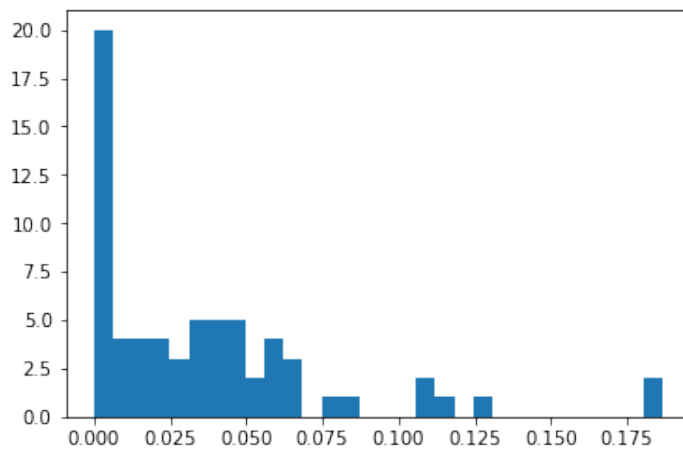


g



h

The most central node is colored green in the graph in question(b)



**i**

