import networkx as nx

import matplotlib.pyplot as plt

def kshell(g,k):

temp=[]

flag=1

while(flag!=0):

tmp=[]

deg=list(g.degree())

count=0

for node,each in deg:

if each<=k:

count+=1

tmp.append(node)

for each in tmp:

temp.append(each)

g.remove\_node(each)

nx.draw(g,with\_labels=1)

plt.show()

if count==0:

flag=0

return temp

def mod(g):

k=1

while(len(g)!=0):

print k,' shell:',kshell(g,k)

k+=1

ref=0

g=nx.Graph()

g.add\_node(1)

g.add\_node(2)

g.add\_node(3)

g.add\_node(4)

g.add\_node(5)

g.add\_node(6)

g.add\_node(7)

g.add\_edge(1,2)

g.add\_edge(1,3)

g.add\_edge(1,4)

g.add\_edge(3,4)

g.add\_edge(3,2)

g.add\_edge(4,2)

g.add\_edge(4,5)

g.add\_edge(5,6)

g.add\_edge(6,3)

g.add\_edge(6,7)

nx.draw(g,with\_labels=1)

plt.show()

mod(g)