for x in range(2):

a = nx.Graph()

b = nx.Graph()

#set distance between nodes

nd = 1

#set distance between blocks

x\_offset = x\*nd\*6

x\_step = x\*nd\*6 + 4

edges\_out = [(0,1),(0,3),(0,4),(1,2),(1,5),(2,3),(2,6),(3,7),(4,5),(4,7),(5,6),(6,7)]

edges\_in = [(0,1), (1,2), (2,3), (3,0)]

pos\_out = {0: (0+x\_offset,0), 1: (3\*nd+x\_offset, 0), 2: (3\*nd+x\_offset, 3\*nd), 3: (0+x\_offset, 3\*nd), 4: (nd+x\_offset,nd), 5: (2\*nd+x\_offset,nd), 6: (2\*nd+x\_offset,2\*nd), 7: (nd+x\_offset,2\*nd) }

pos\_in = {0: (0 + x\_step, nd\*2), 1: (nd + x\_step, nd\*2), 2: (nd + x\_step, nd), 3: (0 + x\_step, nd)}

print(pos\_in)

print(pos\_out)

pos\_total = {\*\*pos\_out, \*\*pos\_in}

print(pos\_total)

a.add\_edges\_from(edges\_out)

b.add\_edges\_from(edges\_in)

nx.draw(a, pos\_out)

nx.draw(b, pos\_in)

a.clear()

Attempt at stitching together:

for x in range(1):

a = nx.Graph()

b = nx.Graph()

#set distance between nodes

nd = 1

#set distance between blocks

x\_offset = x\*nd\*6

x\_step = x\*nd\*6 + 4

edges\_out = [(0,1),(0,3),(0,4),(1,2),(1,5),(2,3),(2,6),(3,7),(4,5),(4,7),(5,6),(6,7)]

#edges\_in = [(0,1), (1,2), (2,3), (3,0)]

edges\_in = [(8,9), (9, 10), (10,11), (11,0)]

pos\_out = {0: (0+x\_offset,0), 1: (3\*nd+x\_offset, 0), 2: (3\*nd+x\_offset, 3\*nd), 3: (0+x\_offset, 3\*nd), 4: (nd+x\_offset,nd), 5: (2\*nd+x\_offset,nd), 6: (2\*nd+x\_offset,2\*nd), 7: (nd+x\_offset,2\*nd) }

pos\_in = {8: (0 + x\_step, nd\*2), 9: (nd + x\_step, nd\*2), 10: (nd + x\_step, nd), 11: (0 + x\_step, nd)}

print(pos\_in)

print(pos\_out)

pos\_total = {\*\*pos\_out, \*\*pos\_in}

print(pos\_total)

a.add\_edges\_from(edges\_out)

b.add\_edges\_from(edges\_in)

#nx.draw(a, pos\_out)

#nx.draw(b, pos\_in)

c = nx.compose(a,b)

nx.draw(c, pos\_total)

a.clear()