**graph = TinkerGraph.open()**

g = graph.traversal()

cs526 = graph.addVertex('name','cs526')

cs400 = graph.addVertex('name','cs400')

cs334 = graph.addVertex('name','cs334')

cs681 = graph.addVertex('name','cs681')

cs201 = graph.addVertex('name','cs201')

cs220 = graph.addVertex('name','cs220')

cs420 = graph.addVertex('name','cs420')

cs101 = graph.addVertex('name','cs101')

cs526.addEdge('pq',cs400)

cs400.addEdge('aa',cs526)

cs400.addEdge('pq',cs334)

cs681.addEdge('pq',cs334)

cs334.addEdge('pq',cs201)

cs201.addEdge('pq',cs101)

cs220.addEdge('pq',cs201)

cs420.addEdge('pq',cs220)

cs220.addEdge('aa',cs420)

g.V().match( \_\_.as('a').out('pq').as('b'), \_\_.as('b').out('aa').as('a')).select('a','b').by('name')

g.V(cs526).repeat(out('pq').dedup()).until(out('pq').count().is(0)).emit().values()

g.V().has('name','cs101').repeat(\_\_.in('pq')).emit().path().count(local).max()