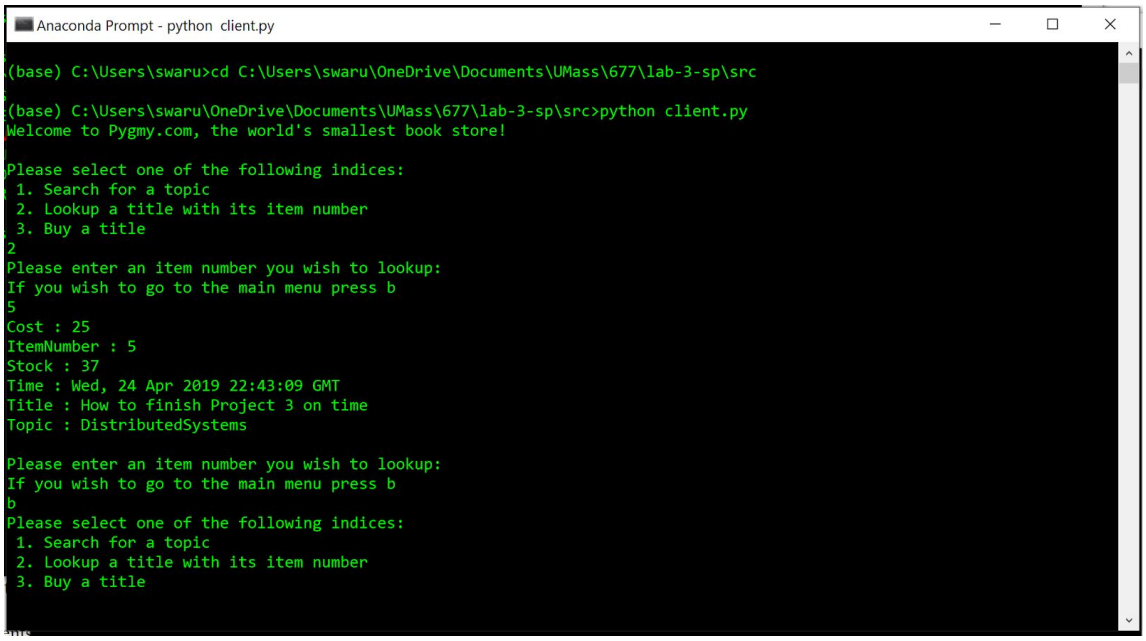
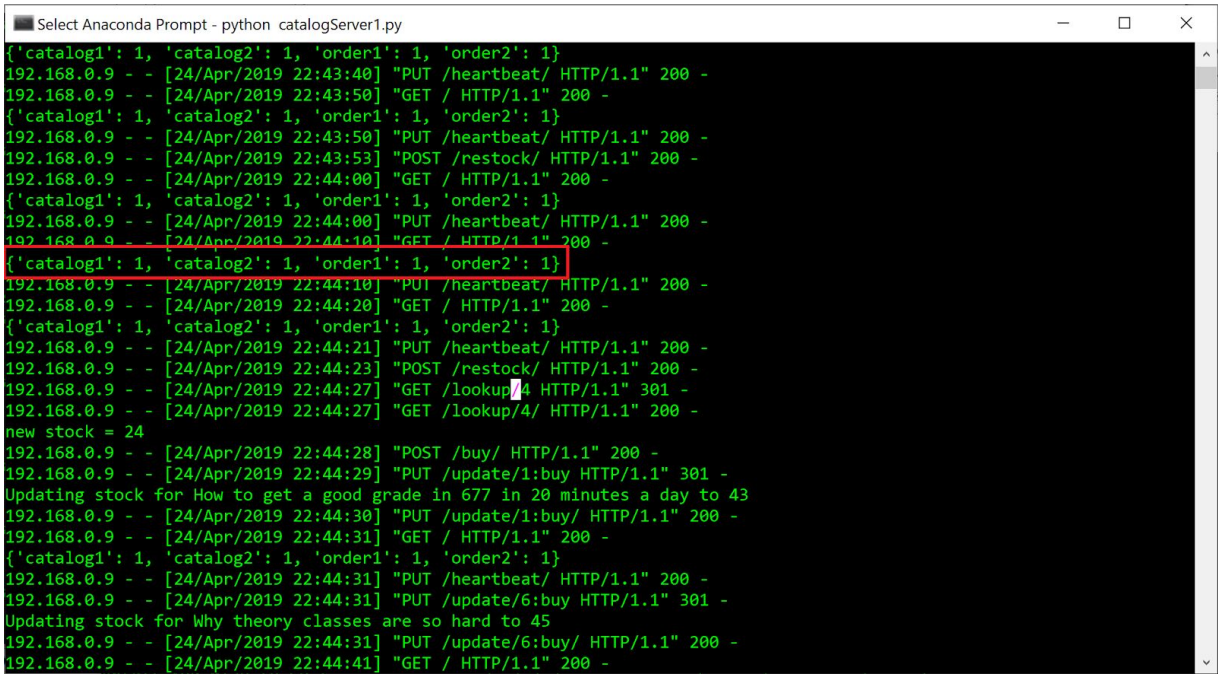
Fault Tolerance Experiment

- Scenario 1: All servers are up:
  Below are the screenshots of various components

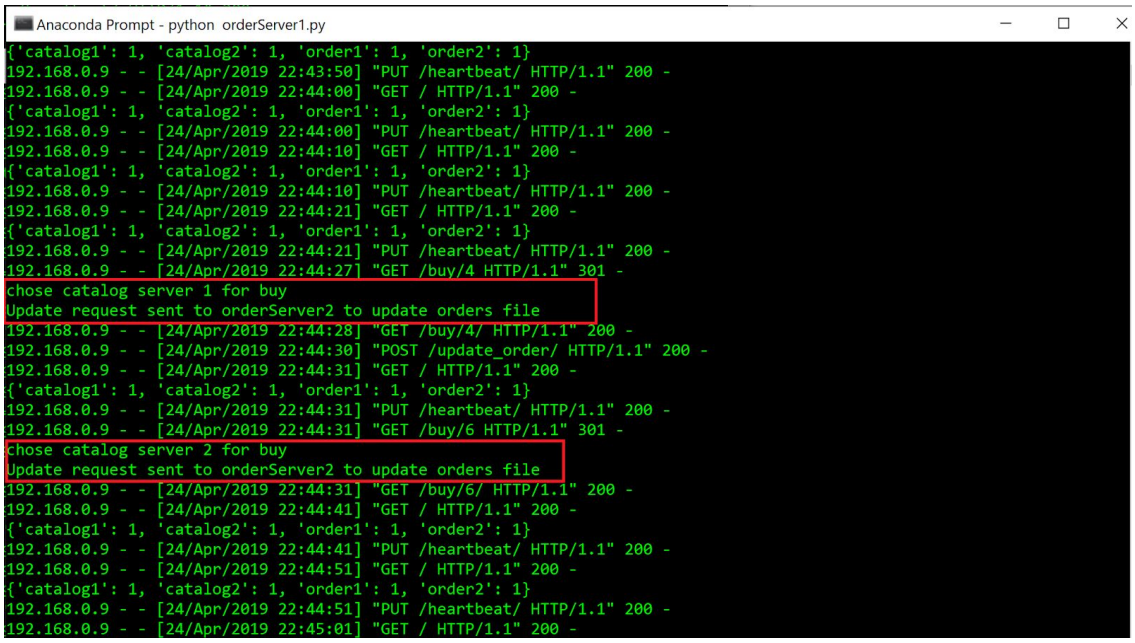
  Client.py:



  catalogServer1.py: All server flags are ‘1’ which means all are up.

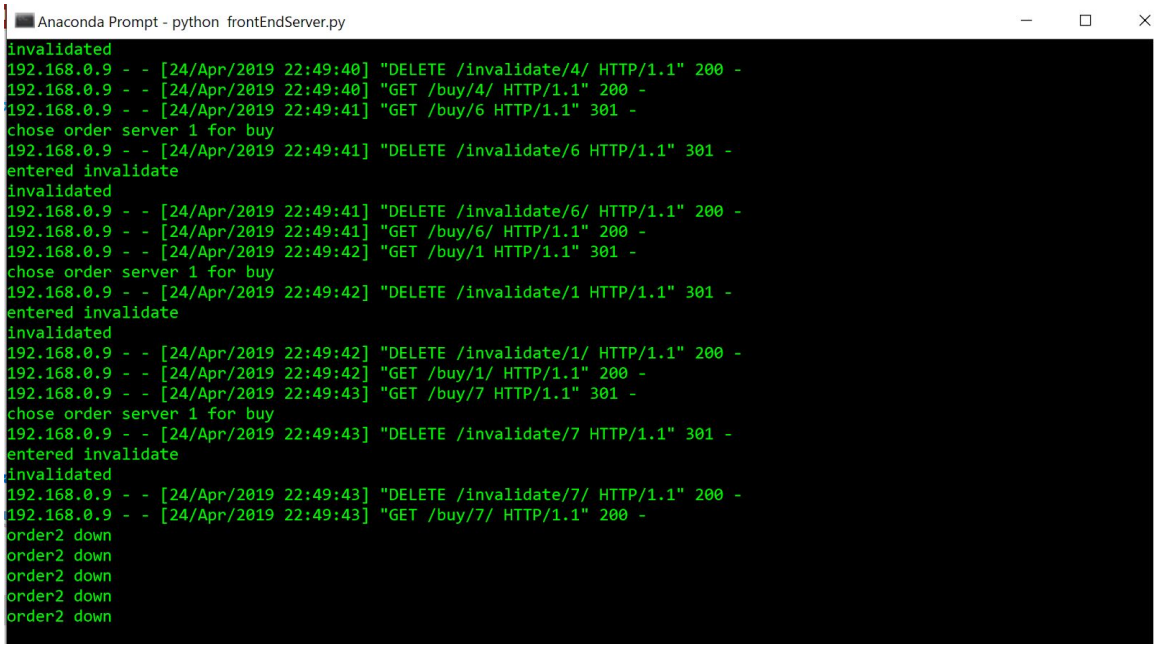


orderServer1.py: The highlighted boxes show that both catalogServers are being requested in a round robin fashion and the other orderServer is also being sent an update request

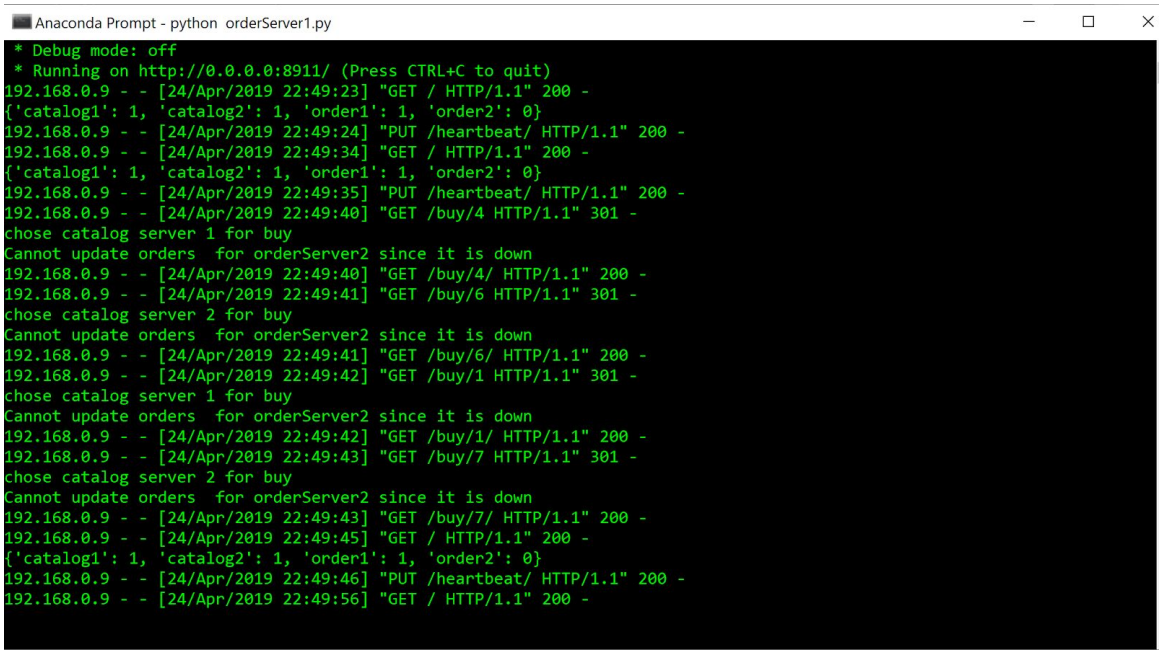


- Scenario 2: OrderServer2 is down
  Below are a few screenshots to demostrate

  frontEndServer.py: The heartbeat has detected that orderServer2 is down and also sends this information to the other servers. All buy requests are now routed to orderServer1

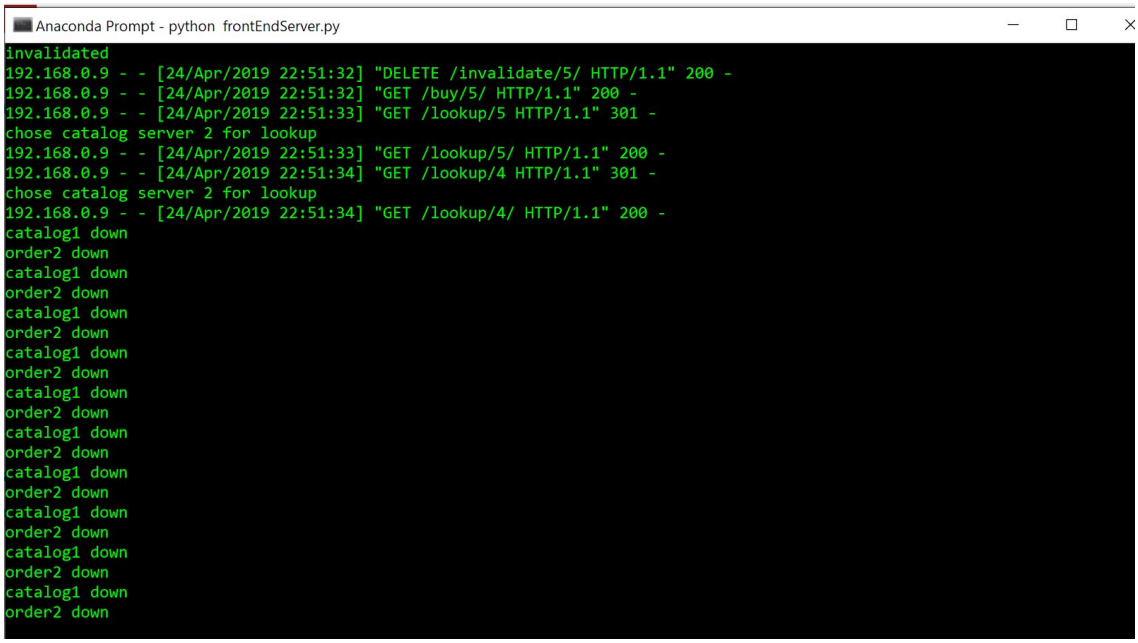


orderServer1.py

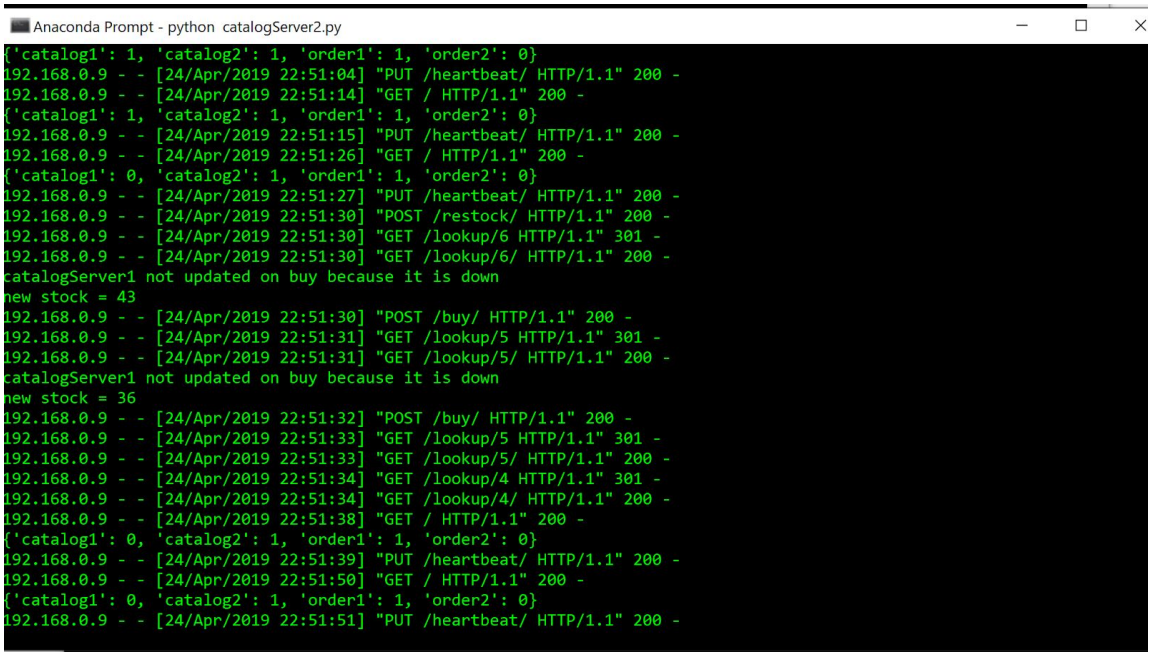


- Scenario 3: Catalog Server 1 and order server 2 are down

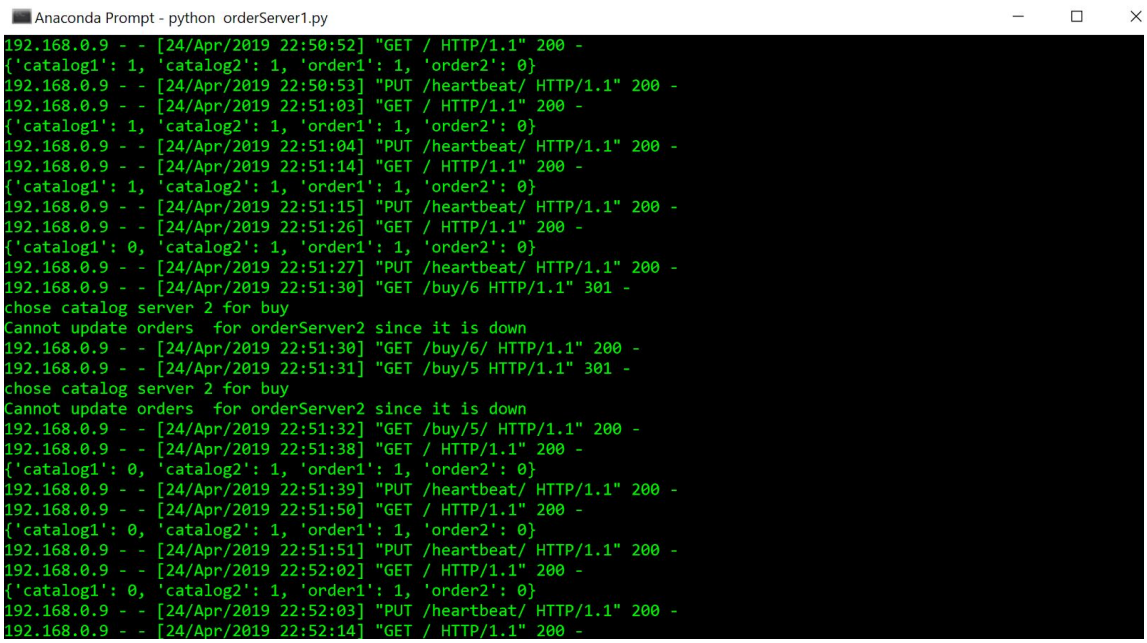
frontEndServer.py:



cataogServer1.py: All requests are now routed to catalogServer1

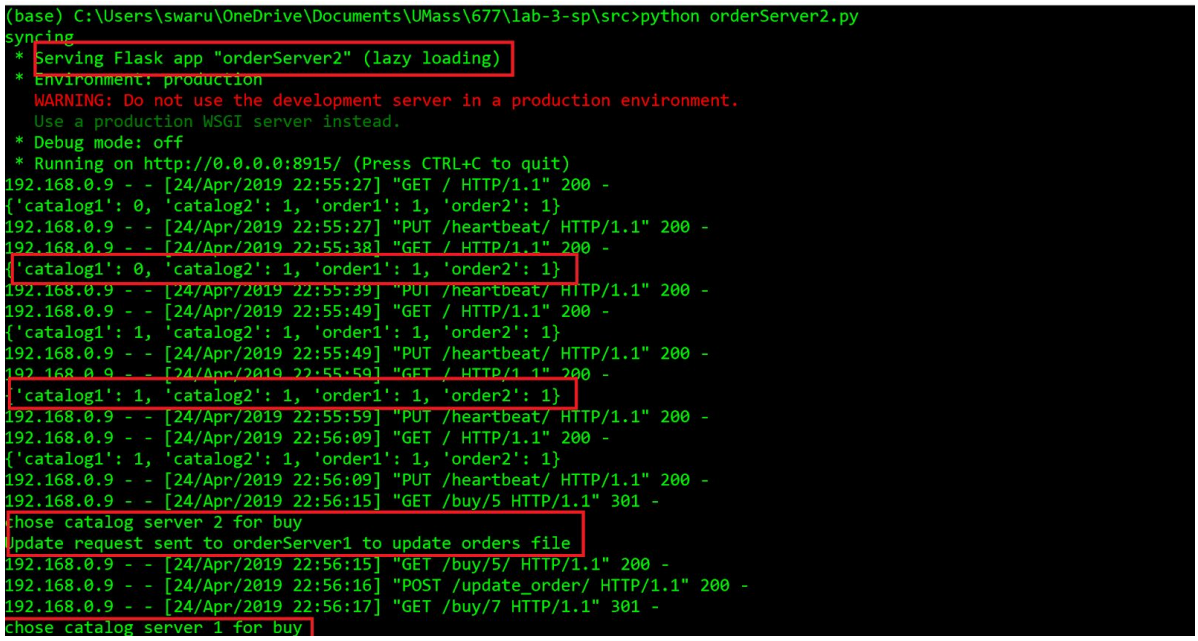


orderServer2:



- Scenario 4: catalogServer2 and orderServer1 are restarted

  orderServer2.py: Both catalogServers are now being requested



  Here we can see that flags of both catalog1 and order2 are set to ‘1’
  And all buy requests are now being serviced by both catalogServers