Chapter 2: Authorization and Encryption

Homework 2.4 : Create replica with TLS enabled

This homework should be pretty straightforward given how many times you've configured a replica set with SSL certificates in past homeworks.

First we'll need to create our directory structure. After that we're ready to spin up the members of our replica set. The key here is to pass the `--sslMode requireSSL` option to each `mongod`.

```
$ mkdir -p ~/M310-HW-2.4/{r0,r1,r2}
$ mongod --port 31240 --dbpath ~/M310-HW-2.4/r0 --logpath
~/M310-HW-2.4/r0/mongo.log \
        --fork --sslMode requireSSL --replSet HW-2.4 --
sslCAFile ~/shared/certs/ca.pem \
        --sslPEMKeyFile ~/shared/certs/server.pem
$ mongod --port 31241 --dbpath ~/M310-HW-2.4/r1 --logpath
~/M310-HW-2.4/r1/mongo.log \
        --fork --sslMode requireSSL --replSet HW-2.4 --
sslCAFile ~/shared/certs/ca.pem \
        --sslPEMKeyFile ~/shared/certs/server.pem
$ mongod --port 31242 --dbpath ~/M310-HW-2.4/r2 --logpath
~/M310-HW-2.4/r2/mongo.log \
        --fork --sslMode requireSSL --replSet HW-2.4 --
sslCAFile ~/shared/certs/ca.pem \
        --sslPEMKeyFile ~/shared/certs/server.pem
```

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After our servers are up and running we're free to connect to the server running on port **31240** and initiate the replica set.

```
$ mongo --port 31240 --host database.m310.mongodb.university --ssl \
        --sslPEMKeyFile ~/shared/certs/client.pem --sslCAFile ~/shared/certs/ca.pem
config = {
      "_id" : "HW-2.4",
      "members" : [
    {
      "_id" : 0,
      "host" : "database.m310.mongodb.university:31240"
    },
    {
      "_id" : 1,
      "host" : "database.m310.mongodb.university:31241"
    },
    {
      "_id" : 2,
      "host" : "database.m310.mongodb.university:31242"
    }
  ]
}
rs.initiate(config)
```

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Proceed to next section