```
td6@js-156-163:~$ mongo
MongoDB shell version v3.6.3
connecting to: mongodb://127.0.0.1:27017
MongoDB server version: 3.6.3
Welcome to the MongoDB shell.
For interactive help, type "help".
For more comprehensive documentation, see
         http://docs.mongodb.org/
Questions? Try the support group
         http://groups.google.com/group/mongodb-user
Server has startup warnings:
2018-10-22T15:04:58.234-0900 I STORAGE
                                              [initandlisten]
2018-10-22T15:04:58.234-0900 I STORAGE [initandlisten] ** WARNING: Using the XF
S filesystem is strongly recommended with the WiredTiger storage engine
2018-10-22T15:04:58.234-0900 I STORAGE [initandlisten] **
                                                                              See http://d
ochub.mongodb.org/core/prodnotes-filesystem
                                              [initandlisten]
2018-10-22T15:04:59.153-0900 I CONTROL
2018-10-22T15:04:59.153-0900 I CONTROL
                                              [initandlisten] ** WARNING: Access contr
ol is not enabled for the database.
2018-10-22T15:04:59.153-0900 I CONTROL [initandlisten] **
                                                                              Read and wri
te access to data and configuration is unrestricted.
2018-10-22T15:04:59.153-0900 I CONTROL [initandlisten]
show dbs
             0.000GB
admin
config
             0.000GB
local
             0.000GB
saraheb3
             0.000GB
test
             0.000GB
yangq2
             0.000GB
your_netID 0.000GB
> use td6
switched to db td6
> db.class.insert({num:"geog479", name:"cyberGIS"})
WriteResult({ "nInserted" : 1 })
> db.class.insert({_id:"g480", num:"geog480" ,name:"Principles of GIS"})
WriteResult({ "nInserted" : 1 })
> db.class.save({_id:"g480", num:"geog480", name:"Principles of GIS-Old"})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.class.save({num:"geog480", name:"Principles of GIS-new"})
WriteResult({ "nInserted" : 1 })
show collections
class
 db.class.find()
{ "_id" : ObjectId("5bd22a2ae1ad967c4efbd40a"), "num" : "geog479", "name" : "cyb
 "_id" : "g480", "num" : "geog480", "name" : "Principles of GIS-Old" }
"_id" : ObjectId("5bd22be5e1ad967c4efbd40b"), "num" : "geog480", "name" : "Pri
nciples of GIS-new" }
> db.class.findOne()
         " id" : ObjectId("5bd22a2ae1ad967c4efbd40a"),
         "num" : "geog479",
         "name" : "cyberGIS"
```

```
> db.class.find({num:"geog480"})
  "_id" : "g480", "num" : "geog480", "name" : "Principles of GIS-Old" }
 "id" : ObjectId("5bd22be5e1ad967c4efbd40b"), "num" : "geog480", "name" : "Pri
nciples of GIS-new" }
> db.class.find({$and:[{num:"geog480"},{_id:"g480"}]})
  __id" : "g480", "num" : "geog480", "name" : "Principles of GIS-Old" }
> db.class.find({$and:[{num:"geog479"},{ id:{$ne:"g480"}}]})
{ " id" : ObjectId("5bd22a2aelad967c4efbd40a"), "num" : "geog479", "name" : "cyb
erGIS" }
> db.class.update({num:"geog479"}, {"num":"geog479","name":"cyberGIS",classroom:
"NHB1020"})
WriteResult({    "nMatched" : 1,    "nUpserted" : 0,    "nModified" : 1    })
> db.class.find()
{ "_id" : ObjectId("5bd22a2aelad967c4efbd40a"), "num" : "geog479", "name" : "cyberGIS", "classroom" : "NHB1020" }
 "_id" : "g480", "num" : "geog480", "name" : "Principles of GIS-Old" }
{ "_id" : ObjectId("5bd22be5e1ad967c4efbd40b"), "num" : "geog480", "name" : "Pri
nciples of GIS-new" }
> db.class.update({num:"geog479"},{$set:{hours:"3:30-4:50pm T Th"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.class.find({num:{$ne:"geog480"}})
{ "_id" : ObjectId("5bd22a2aelad967c4efbd40a"), "num" : "geog479", "name" : "cyberGIS", "classroom" : "NHB1020", "hours" : "3:30-4:50pm T Th" }
> db.class.update({},{$set:{University:"UIUC"}},false,true)
WriteResult({ "nMatched" : 3, "nUpserted" : 0, "nModified" : 3 })
> db.class.find()
{ " id" : ObjectId("5bd22a2ae1ad967c4efbd40a"), "num" : "geog479", "name" : "cyb
erGIS", "classroom" : "NHB1020", "hours" : "3:30-4:50pm T Th", "University" : "U
TUC" }
{ " id" : "g480", "num" : "geog480", "name" : "Principles of GIS-Old", "Universi
ty" : "UIUC" }
{ "_id" : ObjectId("5bd22be5e1ad967c4efbd40b"), "num" : "geog480", "name" : "Pri
nciples of GIS-new", "University" : "UIUC" }
{ " id" : ObjectId("5bd22be5e1ad967c4efbd40b"), "num" : "geog480", "name" : "Pri
nciples of GIS-new", "University" : "UIUC" }
> db.class.remove({num:/480$/})
WriteResult({ "nRemoved" : 2 })
> db.class.find()
{ " id" : ObjectId("5bd22a2ae1ad967c4efbd40a"), "num" : "geog479", "name" : "cyb
erGIS", "classroom" : "NHB1020", "hours" : "3:30-4:50pm T Th", "University" : "U
IUC" }
 exit
bye
```

```
from pymongo import MongoClient
import datetime
import json
import os
def main():
        client=MongoClient('mongodb://localhost:27017')
        db=client.td6
        collection=db['chicago']
        mFile=open("/projects/geog479/lab8/sample.txt", "rb")
        for mLine in mFile:
                [uid,lat,lng,tm,msg]=mLine.split("\t")
                latt=float(lat)
                lngg=float(lng)
                geoString={'td6':uid,'time':tm,'message':msg,'loc':{'type':'Poi$
                print geoString
                db.chicago.insert(geoString)
if name ==' main ':
        main()
td6@js-156-163:~$ python mongoimport.py
{'loc': {'type': 'Point', 'coordinates': [-87.70267987, 41.88184949]}, 'message'
: 'I look so beautiful on glide \xf4\x80\x8d\xbd\n', 'td6': '92799200', 'time':
'Thu Jul 03 23:59:55 CDT 2014'}
{'loc': {'type': 'Point', 'coordinates': [-88.25290795, 41.72373577]}, 'message'
: '@benwimmer_ you followed me in ig and twitter \xf4\x80\x8d\xbd\xf4\x80\x8d\xb
d\n', 'td6': '1448734256', 'time': 'Thu Jul 03 23:59:55 CDT 2014'}
{'loc': {'type': 'Point', 'coordinates': [-88.1317567, 41.5973941]}, 'message':
'I can live off just chocolate covered bananas , no questions asked , I can\n',
'td6': '340179245', 'time': 'Thu Jul 03 23:59:57 CDT 2014'}
{'loc': {'type': 'Point', 'coordinates': [-88.2482691, 41.4206919]}, 'message':
'Happy birthday bro! @cfernandez242\n', 'td6': '1468708615', 'time': 'Fri Jul 04
00:00:01 CDT 2014'}
{'loc': {'type': 'Point', 'coordinates': [-88.44600429, 42.2389208]}, 'message':
 'Happy 4th!!! \xf4\x80\x8e\x8d\xf4\x80\x8e\x8d\n', 'td6': '481757360', 'time':
'Fri Jul 04 00:00:01 CDT 2014'}
x85\xb7\xf4\x80\x8e\x88\n', 'td6': '379503841', 'time': 'Fri Jul 04 00:00:02 CDT
2014'}
{'loc': {'type': 'Point', 'coordinates': [-87.7311006, 41.7757881]}, 'message':
'@jatomatoledO cara de moco te adoro y te amito y te quiero enormemente por ser
el \xc3\xbanico que me aguante y ser el mejor amigo\n', 'td6': '559985840', 'tim
e': 'Fri Jul 04 00:00:03 CDT 2014'}
{'loc': {'type': 'Point', 'coordinates': [-87.8750031, 42.3489168]}, 'message':
'Happy 7414 \xf4\x80\x8d\xb2\xf4\x80\x8a\x80\n', 'td6': '305350230', 'time': 'Fr
i Jul 04 00:00:05 CDT 2014'}
```