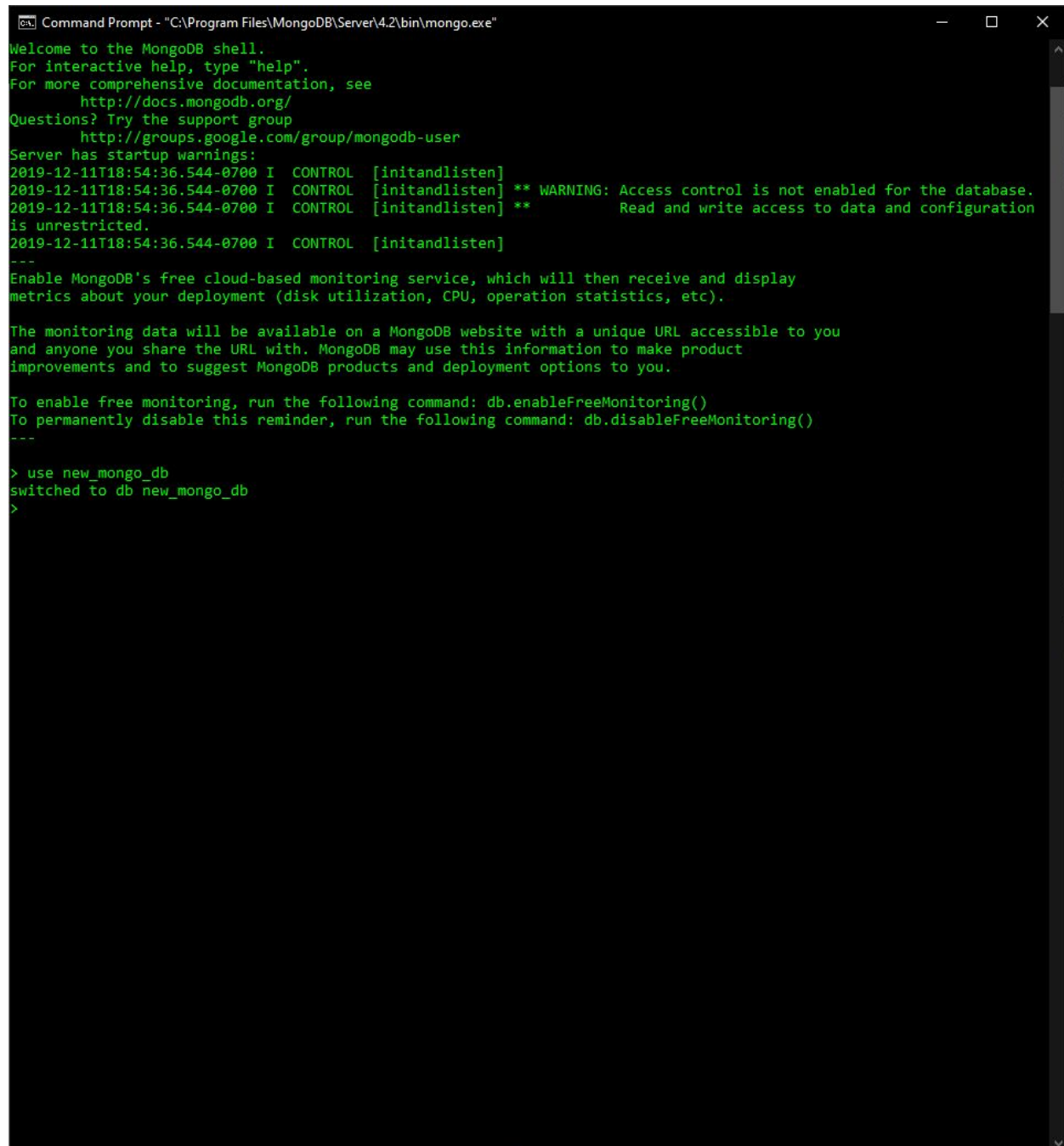


Task 1:

"C:\Program Files\MongoDB\Server\4.2\bin\mongo.exe"

1.)



```
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> use new_mongo_db
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>
```

2.)

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> use new_mongo_db
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> db.dropDatabase()
{ "ok" : 1 }
>
```

3.)

```
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>
>
> use new_mongo_db
switched to db new_mongo_db
> db.createCollection("test_collection")
{ "ok" : 1 }
>
```

4.)

```
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> db.test_collection.drop()
true
>
```

5.)

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> db.createCollection("test_collection")
{ "ok" : 1 }
> db.test_collection.drop()
true
>
>
> db.createCollection("test_collection")
{ "ok" : 1 }
> db.test_collection.insert({title: "MongoDb practice", description: "first document"})
WriteResult({ "nInserted" : 1 })
>
```

6.)

```
Command Prompt - "C:\Program Files\MongoDB\Server\4.2\bin\mongo.exe"

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> db.createCollection("test_collection")
{ "ok" : 1 }
> db.test_collection.drop()
true
>
>
> db.createCollection("test_collection")
{ "ok" : 1 }
> db.test_collection.insert({title: "MongoDb practice", description: "first document"})
WriteResult({ "nInserted" : 1 })
> db.test_collection.find().pretty()
{
  "_id" : ObjectId("5df1a3fbb76fdcb4d7d7cefb"),
  "title" : "MongoDb practice",
  "description" : "first document"
}
```


7.)

```
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WriteResult({ "nInserted" : 1 })
> db.test_collection.find().pretty()
{
  "_id" : ObjectId("5df1a3fbb76fdcb4d7d7cefb"),
  "title" : "MongoDb practice",
  "description" : "first document"
}
> db.test_collection.update({'title':'MongoDb practice'},{$set:{ 'title':'New MongoDB practice'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```

8.)

```
Command Prompt - "C:\Program Files\MongoDB\Server\4.2\bin\mongo.exe"

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WriteResult({ "nInserted" : 1 })
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}
> db.test_collection.update({'title':'MongoDb practice'},{$set:{ 'title':'New MongoDB practice'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.test_collection.remove({ status:"P"})
WriteResult({ "nRemoved" : 0 })
> db.test_collection.find().pretty()
{
  "_id" : ObjectId("5df1a3fbb76fdcb4d7d7cefb"),
  "title" : "New MongoDB practice",
  "description" : "first document"
}
> db.test_collection.remove({})
WriteResult({ "nRemoved" : 1 })
>
```


Task 2:

"C:\Program Files\MongoDB\Server\4.2\bin\mongoimport.exe" --db test --collection restaurants --drop --file "C:\Users\jacob\Dropbox\Classes\Database\Homework6\primer-dataset.json"

[In different terminal window]

"C:\Program Files\MongoDB\Server\4.2\bin\mongo.exe"

1.) db.restaurants.count ({name: /Sandwich/})

Answer: 76

2.) db.restaurants.find ({ borough: /Queens/, cuisine: /French/},{name:1, _id:0})

```
> db.restaurants.find ({borough: /Queens/, cuisine: /French/},{name:1, _id:0})
{ "name" : "La Baraka Restaurant" }
{ "name" : "Air France Lounge" }
{ "name" : "Tournesol" }
{ "name" : "Winegasm" }
{ "name" : "Cafe Henri" }
{ "name" : "Bistro 33" }
{ "name" : "Domaine Wine Bar" }
{ "name" : "Cafe Triskell" }
{ "name" : "Cannelle Patisserie" }
{ "name" : "La Vie" }
{ "name" : "Dirty Pierres Bistro" }
{ "name" : "Fresca La Crepe" }
{ "name" : "Bliss 46 Bistro" }
{ "name" : "Bear" }
{ "name" : "Cuisine By Claudette" }
{ "name" : "Paris Baguette" }
{ "name" : "The Baroness Bar" }
{ "name" : "Francis Cafe" }
{ "name" : "Madame Sou Sou" }
{ "name" : "Crepe 'N' Tearia" }
Type "it" for more
> it
{ "name" : "Aperitif Bayside Llc" }
```

3.) db.restaurants.aggregate([{\$match:{"cuisine":"Italian"}}, {\$group: {_id: "\$borough", count: {\$sum:1}}}, {\$sort:count:-1}}])

```
> db.restaurants.aggregate([ {$match:{"cuisine":"Italian"}}, {$group: {_id:
"$borough", count:{$sum:1}}}, {$sort:{count:-1}} ])
{ "_id" : "Manhattan", "count" : 621 }
{ "_id" : "Brooklyn", "count" : 192 }
{ "_id" : "Queens", "count" : 131 }
{ "_id" : "Staten Island", "count" : 73 }
{ "_id" : "Bronx", "count" : 52 }
```

4.) db.restaurants.aggregate([{\$match:{"cuisine":"German", "borough":"Manhattan"}}, {\$unwind:"\$grades"}, {\$group: {_id: "\$name", count: {\$sum:"\$grades.score"}}}, {\$sort:count:-1}}, {\$limit:5}])

```
> db.restaurants.aggregate([ {$match:{"cuisine":"German", "borough":"Manhattan"}}, {$unwind:"$grades"}, {$group: {_id: "$name", count: {$sum:"$grades.score"}}}, {$sort:count:-1}}, {$limit:5} ])
{ "_id" : "Edi & The Wolf", "count" : 105 }
{ "_id" : "Blaue Gans", "count" : 103 }
{ "_id" : "Sigmund Pretzel Shop", "count" : 71 }
{ "_id" : "Hallo Berlin", "count" : 67 }
{ "_id" : "Zum Schneider", "count" : 58 }
>
```

5.) I wasn't able to complete this question fully. I couldn't get the location/coords part to work. However, everything else is functional as seen here:

db.restaurants.aggregate([{\$unwind:"\$grades"}, {\$group: {_id: "\$name", hiscore: {\$max:"\$grades.score"}}}, {\$match:{"hiscore":{\$gte:75}}}, {\$sort:hiscore:-1}])

```
> db.restaurants.aggregate([ {$unwind:"$grades"}, {$group: {_id: "$name", hiscore: {$max:"$grades.score"}}}, {$match:{"hiscore":{$gte:75}}}, {$sort:hiscore:-1} ])
{ "_id" : "Murals On 54/Randolphs'S", "hiscore" : 131 }
{ "_id" : "Baluchi'S Indian Food", "hiscore" : 98 }
{ "_id" : "Bella Napoli", "hiscore" : 98 }
{ "_id" : "Gandhi", "hiscore" : 92 }
{ "_id" : "Concrete Restaurant", "hiscore" : 90 }
{ "_id" : "West 79Th Street Boat Basin Cafe", "hiscore" : 89 }
{ "_id" : "D & Y Restaurant", "hiscore" : 86 }
{ "_id" : "Bistro Caterers", "hiscore" : 84 }
{ "_id" : "Spicy Shallot", "hiscore" : 84 }
{ "_id" : "La Potencia Restaurant", "hiscore" : 82 }
{ "_id" : "Cafe R", "hiscore" : 82 }
{ "_id" : "Anella", "hiscore" : 81 }
{ "_id" : "B.B. Kings", "hiscore" : 80 }
{ "_id" : "La Trattoria", "hiscore" : 79 }
{ "_id" : "Lexington Restaurant", "hiscore" : 79 }
{ "_id" : "Gal Bi Ma Eul", "hiscore" : 78 }
{ "_id" : "Cheikh Umar Futiyu Restaurant", "hiscore" : 78 }
{ "_id" : "Mars Cafe", "hiscore" : 78 }
{ "_id" : "Fortunato Bros Cafe & Bakery", "hiscore" : 77 }
{ "_id" : "Pino'S La Forchetta", "hiscore" : 77 }
Type "it" for more
> it
{ "_id" : "Midtown Buffet", "hiscore" : 77 }
{ "_id" : "Brothers Fish Market", "hiscore" : 77 }
{ "_id" : "Two Boots Grand Central", "hiscore" : 76 }
{ "_id" : "El Molino Rojo Restaurant", "hiscore" : 76 }
{ "_id" : "Georges Restaurant", "hiscore" : 76 }
{ "_id" : "East Japanese Restaurant", "hiscore" : 76 }
{ "_id" : "Zymi Bar & Grill", "hiscore" : 75 }
{ "_id" : "Juice It Health Bar", "hiscore" : 75 }
>
```

My attempt at location:

(ran this command before the below image): `db.restaurants.createIndex({ location: "2dsphere" })`

```
> db.restaurants.aggregate([ {$match:{location:{$geoWithin:{$geometry:{type:"Polygon", coordinates:[ [ [-74,40.5],[-74,40.7],[-73.5,40.5],[-73.5,-40.7] ] ] } } } }}, {$unwind:"$grades"}, {$group:{_id:"$name", hiscore:{$max:"$grades.score"} }}, {$match:{"hiscore":{$gte:75}}}, {$sort:{hiscore:-1}} ]])
2019-12-12T13:59:19.555-0700 E QUERY [js] uncaught exception: Error: command failed: {
  "ok" : 0,
  "errmsg" : "Loop is not closed: [ [ -74.0, 40.5 ], [ -74.0, 40.7 ], [ -73.5, 40.5 ], [ -73.5, -40.7 ] ]",
  "code" : 2,
  "codeName" : "BadValue"
} : aggregate failed :
_getErrorWithCode@src/mongo/shell/utils.js:25:13
doassert@src/mongo/shell/assert.js:18:14
_assertCommandWorked@src/mongo/shell/assert.js:583:17
assert.commandWorked@src/mongo/shell/assert.js:673:16
DB.prototype._runAggregate@src/mongo/shell/db.js:266:5
DBCollection.prototype.aggregate@src/mongo/shell/collection.js:1012:12
@(shell):1:1
>
```