

Progress Report:

- Installed MongoDB and connected to the server via Mongo daemon.
- Opened a mongo shell connected to a locally-installed MongoDB instance running on port 27017.

```
Command Prompt - mongod
C:\Users\A V NITHYA>mongod
2022-12-01T20:09:42.458-0500 I CONTROL [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'
2022-12-01T20:09:42.821-0500 W ASIO [main] No TransportLayer configured during NetworkInterface startup
2022-12-01T20:09:42.822-0500 I CONTROL [initandlisten] MongoDB starting : pid=7604 port=27017 dbpath=C:\data\db\ 64-bit host=LAPTOP-NMGDFISH
2022-12-01T20:09:42.822-0500 I CONTROL [initandlisten] targetMinOS: Windows 7/Windows Server 2008 R2
2022-12-01T20:09:42.822-0500 I CONTROL [initandlisten] db version v4.2.23
2022-12-01T20:09:42.822-0500 I CONTROL [initandlisten] git version: f4e6602d3a4c5b22e9d8bcf0722d0afd0ec01ea2
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] allocator: tcmalloc
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] modules: none
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] build environment:
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] distmod: 2012plus
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] distarch: x86_64
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] target_arch: x86_64
2022-12-01T20:09:42.823-0500 I CONTROL [initandlisten] options: {}
2022-12-01T20:09:42.825-0500 I STORAGE [initandlisten] Detected data files in C:\data\db\ created by the 'wiredTiger' storage engine, so setting the active storage engine to 'wiredTiger'.
2022-12-01T20:09:42.826-0500 I STORAGE [initandlisten] wiredtiger_open config: create,cache_size=3483M,cache_overflow=(file_max=0M),session_max=33000,eviction=(threads_min=4,threads_max=4),config_base=false,statistics=(fast),log=(enabled=true,archive=true,path=journal,compressor=snappy),file_manager=(close_idle_time=100000,close_scan_interval=10,close_handle_minimum=250),statistics_log=(wait=0),verbose=[recovery_progress,checkpoint_progress],
2022-12-01T20:09:42.842-0500 E STORAGE [initandlisten] WiredTiger error (-31802) [1669943382:841610][7604:140724338188656], connection: __log_open_verify, 925: unsupported WiredTiger file version: this build only supports versions up to 4, and the file is version 5: WT_ERROR: non-specific WiredTiger error Raw: [1669943382:841610][7604:140724338188656], connection: __log_open_verify, 925: unsupported WiredTiger file version: this build only supports versions up to 4, and the file is version 5: WT_ERROR: non-specific WiredTiger error
2022-12-01T20:09:42.849-0500 E STORAGE [initandlisten] WiredTiger error (-31802) [1669943382:849553][7604:140724338188656], connection: __log_open_verify, 925: unsupported WiredTiger file version: this build only supports versions up to 4
```

```
Command Prompt - mongo
C:\Users\A V NITHYA>mongo
MongoDB shell version v4.2.23
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("2ba6834a-8306-4c9f-a8f0-8a7bb8973415") }
MongoDB server version: 4.2.23
Welcome to the MongoDB shell.
For interactive help, type "help".
For more comprehensive documentation, see
  https://docs.mongodb.com/
Questions? Try the MongoDB Developer Community Forums
  https://community.mongodb.com
Server has startup warnings:
2022-12-01T19:46:37.129-0500 I CONTROL [initandlisten]
2022-12-01T19:46:37.129-0500 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2022-12-01T19:46:37.129-0500 I CONTROL [initandlisten] **          Read and write access to data and configuration is
unrestricted.
2022-12-01T19:46:37.130-0500 I CONTROL [initandlisten]
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Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.
```

- Created 'yogastudio' database

```
Command Prompt - mongo
---
> show dbs
admin    0.000GB
config  0.000GB
local   0.000GB
> use yogastudio
switched to db yogastudio
```

- Created 'trainers' collection using db.createCollection() command and displayed the records in the collection using db.collection.find() command

```

Command Prompt - mongo
@(<shell>):1:1
> db.createCollection("trainers")
{ "ok" : 1 }
> show collections
trainers
> db.trainers.insert([{"trainer_id" : 14, "trainer_name" : "Kaley Heller", "number_of_sessions" : 66}, {"trainer_id" : 17, "trainer_name" : "Katherina Zemlak", "number_of_sessions" : 56}, {"trainer_id" : 23, "trainer_name" : "Onie Rutherford", "number_of_sessions" : 53}, {"trainer_id" : 45, "trainer_name" : "Odell Bosco", "number_of_sessions" : 37}, {"trainer_id" : 54, "trainer_name" : "Thaliya Meyert", "number_of_sessions" : 72}])
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 5,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
> db.trainers.find()
{ "_id" : ObjectId("638957f6dc9dafce9d0701a5"), "trainer_id" : 14, "trainer_name" : "Kaley Heller", "number_of_sessions" : 66 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a6"), "trainer_id" : 17, "trainer_name" : "Katherina Zemlak", "number_of_sessions" : 56 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a7"), "trainer_id" : 23, "trainer_name" : "Onie Rutherford", "number_of_sessions" : 53 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a8"), "trainer_id" : 45, "trainer_name" : "Odell Bosco", "number_of_sessions" : 37 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a9"), "trainer_id" : 54, "trainer_name" : "Thaliya Meyert", "number_of_sessions" : 72 }

```

- Created 'satisfaction' collection using db.createCollection() command and displayed the records in the collection using db.collection.find() command

```

Command Prompt - mongo
s" : 72 }
> db.createCollection("satisfaction")
{ "ok" : 1 }
> db.satisfaction.insert([{"survey_number" : 11825, "student_id" : 436, "score" : 1, "trainer_id" : 23}, {"survey_number" : 12633, "student_id" : 769, "score" : 2, "trainer_id" : 25}, {"survey_number" : 17223, "student_id" : 439, "score" : 2, "trainer_id" : 97}, {"survey_number" : 14488, "student_id" : 670, "score" : 4, "trainer_id" : 80}, {"survey_number" : 11005, "student_id" : 665, "score" : 4, "trainer_id" : 20}])
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 5,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
> db.satisfaction.find()
{ "_id" : ObjectId("63895ff2dc9dafce9d0701aa"), "survey_number" : 11825, "student_id" : 436, "score" : 1, "trainer_id" : 23 }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ab"), "survey_number" : 12633, "student_id" : 769, "score" : 2, "trainer_id" : 25 }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ac"), "survey_number" : 17223, "student_id" : 439, "score" : 2, "trainer_id" : 97 }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ad"), "survey_number" : 14488, "student_id" : 670, "score" : 4, "trainer_id" : 80 }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ae"), "survey_number" : 11005, "student_id" : 665, "score" : 4, "trainer_id" : 20 }
>

```

- Created 'trains' collection using db.createCollection() command and displayed the records in the collection using db.collection.find() command

```

> db.trains.find()
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a3"), "trainer_id" : 14, "student_id" : 105 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a4"), "trainer_id" : 17, "student_id" : 294 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a5"), "trainer_id" : 23, "student_id" : 119 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a6"), "trainer_id" : 45, "student_id" : 120 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a7"), "trainer_id" : 23, "student_id" : 295 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a8"), "trainer_id" : 45, "student_id" : 216 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8a9"), "trainer_id" : 23, "student_id" : 265 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8aa"), "trainer_id" : 17, "student_id" : 109 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8ab"), "trainer_id" : 14, "student_id" : 307 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8ac"), "trainer_id" : 17, "student_id" : 109 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8ad"), "trainer_id" : 17, "student_id" : 198 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8ae"), "trainer_id" : 14, "student_id" : 194 }
{ "_id" : ObjectId("638aa4d988bda3eb1d9bf8af"), "trainer_id" : 14, "student_id" : 288 }
>

```

- Query to find the number of trainers who conducted more than 55 sessions using \$match and \$gt function

```

Command Prompt - mongo
> db.trainers.aggregate([{$match: {number_of_sessions: {$gt: 55}}}])
{ "_id" : ObjectId("638957f6dc9dafce9d0701a5"), "trainer_id" : 14, "trainer_name" : "Kaley Heller", "number_of_sessions" : 66 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a6"), "trainer_id" : 17, "trainer_name" : "Katherina Zemlak", "number_of_sessions" : 56 }
{ "_id" : ObjectId("638957f6dc9dafce9d0701a9"), "trainer_id" : 54, "trainer_name" : "Thaliya Meyert", "number_of_sessions" : 72 }
>

```

- Query to find how many students each trainer has trained using aggregate functions \$group, \$count and \$sum

```

Command Prompt - mongo
> db.trains.aggregate([{$group: {_id: "$trainer_id", count: {$sum: 1}}}])
{ "_id" : 14, "count" : 4 }
{ "_id" : 23, "count" : 3 }
{ "_id" : 45, "count" : 2 }
{ "_id" : 17, "count" : 4 }
>

```

- Query to update the rating of a trainer as Y or N based on the score field in satisfaction collection using \$set and \$cond functions.

(If score >= 3, set as Y, else N)

```

Command Prompt - mongo
20 }
> db.satisfaction.aggregate([{$set: {"Y_or_N": {$cond: {if: {$gt: ['$score', 2]}, then: "Y", else: "N"}}}, {$out: 'satisfaction'}}])
> db.satisfaction.find()
{ "_id" : ObjectId("63895ff2dc9dafce9d0701aa"), "survey_number" : 11825, "student_id" : 436, "score" : 1, "trainer_id" : 23, "Y_or_N" : "N" }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ab"), "survey_number" : 12633, "student_id" : 769, "score" : 2, "trainer_id" : 25, "Y_or_N" : "N" }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ac"), "survey_number" : 17223, "student_id" : 439, "score" : 2, "trainer_id" : 97, "Y_or_N" : "N" }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ad"), "survey_number" : 14488, "student_id" : 670, "score" : 4, "trainer_id" : 80, "Y_or_N" : "Y" }
{ "_id" : ObjectId("63895ff2dc9dafce9d0701ae"), "survey_number" : 11005, "student_id" : 665, "score" : 4, "trainer_id" : 20, "Y_or_N" : "Y" }
>

```