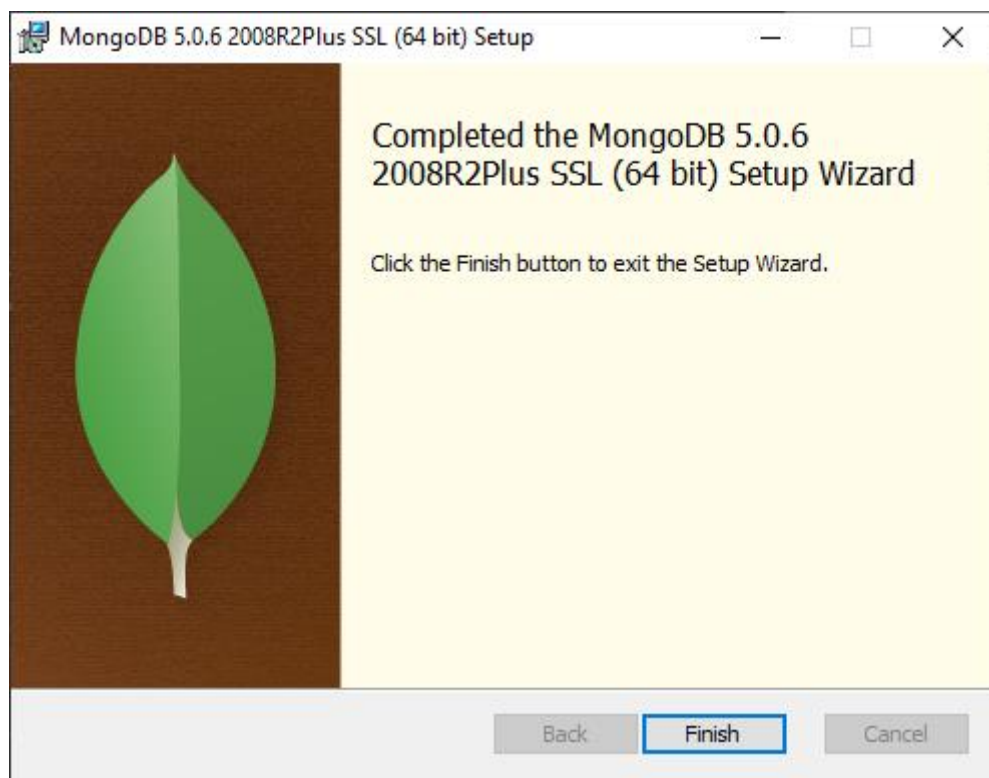




MongoDB Compass is being installed.
It will launch once it is done.

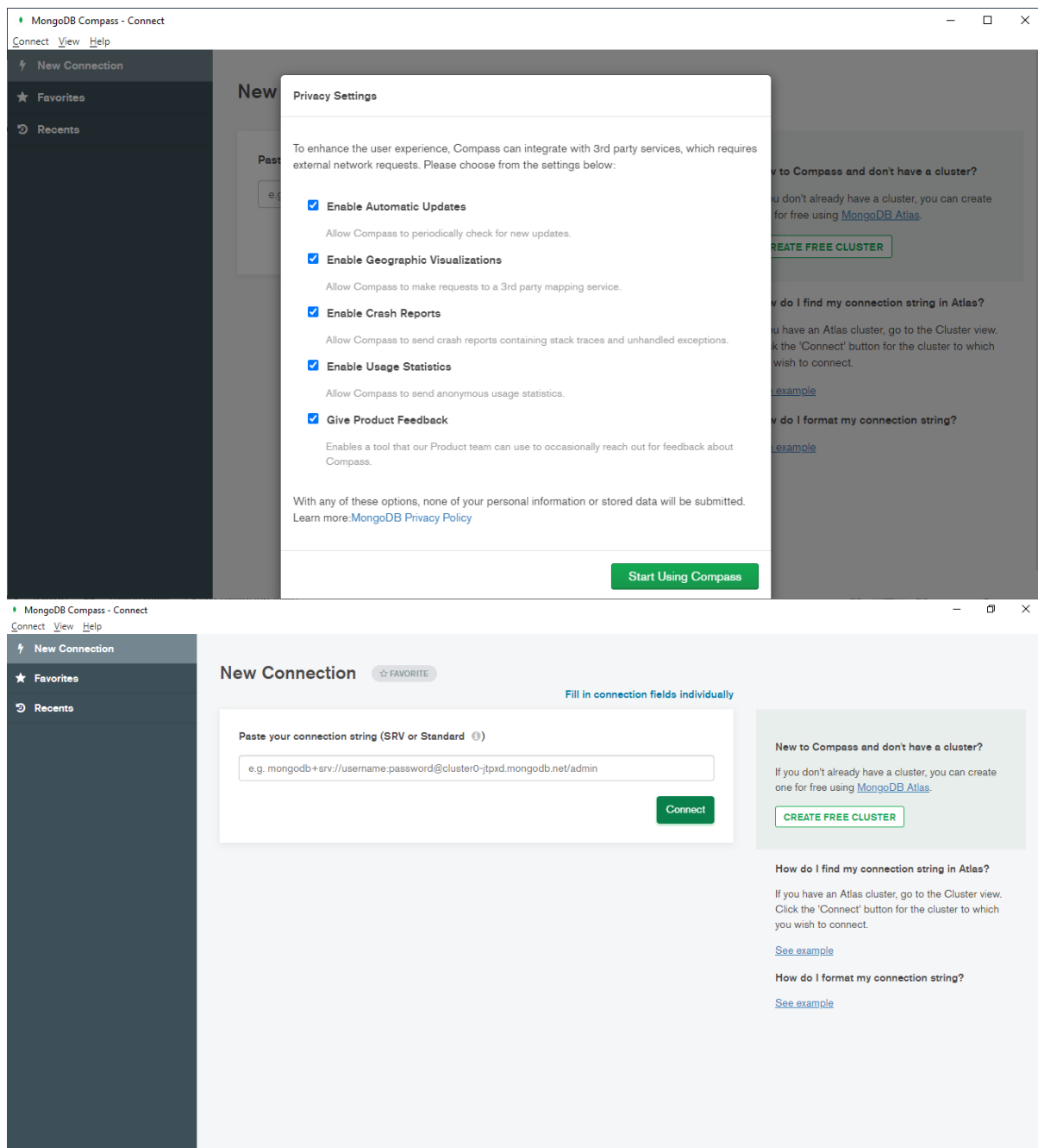


The screenshot displays the MongoDB Compass interface, specifically the 'Welcome to MongoDB Compass' screen. The interface is divided into two main sections: 'Performance Charts' and 'Query History'.

Performance Charts: This section features four line charts showing database operations, queues, network traffic, and connections over time. The charts are labeled 'OPERATIONS', 'READ & WRITE', 'NETWORK', and 'MEMORY'. To the right of the charts, there are two tables: 'HOTTEST COLLECTIONS' and 'SLOWEST OPERATIONS'. The 'HOTTEST COLLECTIONS' table lists collections and their system load percentages. The 'SLOWEST OPERATIONS' table lists operations and their execution times.

Query History: This section displays a list of recent queries. The first query is a find operation on the 'business' collection, filtered by 'status: 1'. The second query is a find operation on the 'business' collection, filtered by 'status: 1' and 'type: 1'.

Navigation: The interface includes a sidebar with 'New Connection', 'Favorites', and 'Recent Connections' options. A 'Next' button is visible in the top right corner of the 'Performance Charts' section. A 'Get Started' button is visible in the bottom right corner of the 'Query History' section.










```

Command Prompt
Microsoft Windows [Version 10.0.18363.657]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd C:\Program Files\MongoDB\Server\5.0\bin
C:\Program Files\MongoDB\Server\5.0\bin>

```

is PC > Local Disk (C:) > Program Files > MongoDB > Server > 5.0 > bin

Name	Date modified	Type	Size
 InstallCompass	27-01-2022 16:20	Windows PowerS...	2 KB
 mongo	27-01-2022 18:03	Application	21,780 KB
 mongod	05-03-2022 08:32	Configuration Sou...	1 KB
 mongod	27-01-2022 18:02	Application	46,547 KB
 mongod.pdb	27-01-2022 18:02	PDB File	5,19,684 KB
 mongos	27-01-2022 17:17	Application	29,367 KB
 mongos.pdb	27-01-2022 17:17	PDB File	3,04,908 KB

```

Command Prompt
Microsoft Windows [Version 10.0.18363.657]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Admin>cd C:\Program Files\MongoDB\Server\5.0\bin
C:\Program Files\MongoDB\Server\5.0\bin>mongod
{"t":{"sdate":"2022-03-05T08:44:36.300+05:30"},"s":"I", "c":"CONTROL", "id":23285, "ctx":"-", "msg":"Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'"}}
{"t":{"sdate":"2022-03-05T08:44:36.302+05:30"},"s":"I", "c":"NETWORK", "id":4915701, "ctx":"-", "msg":"Initialized wire specification", "attr":{"spec":{"incomingExternalClient":{"minWireVersion":0,"maxWireVersion":13},"incomingInternalClient":{"minWireVersion":0,"maxWireVersion":13},"outgoing":{"minWireVersion":0,"maxWireVersion":13},"isInternalClient":true}}}}
{"t":{"sdate":"2022-03-05T08:44:36.968+05:30"},"s":"W", "c":"ASIO", "id":22601, "ctx":"main", "msg":"No TransportLayer configured during NetworkInterface startup"}
{"t":{"sdate":"2022-03-05T08:44:36.968+05:30"},"s":"I", "c":"NETWORK", "id":4648602, "ctx":"main", "msg":"Implicit TCP FastOpen in use."}
{"t":{"sdate":"2022-03-05T08:44:36.970+05:30"},"s":"W", "c":"ASIO", "id":22601, "ctx":"main", "msg":"No TransportLayer configured during NetworkInterface startup"}
{"t":{"sdate":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"REPL", "id":5123008, "ctx":"main", "msg":"Successfully registered PrimaryOnlyService", "attr":{"service":"TenantMigrationDonorService","ns":"config.tenantMigrationDonors"}}
{"t":{"sdate":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"REPL", "id":5123008, "ctx":"main", "msg":"Successfully registered PrimaryOnlyService", "attr":{"service":"TenantMigrationRecipientService","ns":"config.tenantMigrationRecipients"}}
{"t":{"sdate":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"CONTROL", "id":5945603, "ctx":"main", "msg":"Multi threading initialized"}
{"t":{"sdate":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":4615611, "ctx":"initandlisten", "msg":"MongoDB starting", "attr":{"pid":2004,"port":27017,"dbPath":"C:/data/db/", "architecture":"64-bit","host":"PC-65"}}
{"t":{"sdate":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":23398, "ctx":"initandlisten", "msg":"Target operating system minimum version", "attr":{"targetMinOS":"Windows 7/Windows Server 2008 R2"}}
{"t":{"sdate":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":23403, "ctx":"initandlisten", "msg":"Build Info", "attr":{"buildInfo":{"version":"5.0.6","gitVersion":"212a8dbb47f07427dae194a9c75baec1d81d9259","modules":[],"allocator":"tcmalloc","environment":{"distmod":"windows","distarch":"x86_64","target_arch":"x86_64"}}}}
{"t":{"sdate":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":51765, "ctx":"initandlisten", "msg":"Operating System", "attr":{"os":{"name":"Microsoft Windows 10","version":"10.0 (build 18363)}}}}
{"t":{"sdate":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":21951, "ctx":"initandlisten", "msg":"Options set by command line", "attr":{"options":{}}}
{"t":{"sdate":"2022-03-05T08:44:36.973+05:30"},"s":"E", "c":"CONTROL", "id":20557, "ctx":"initandlisten", "msg":"DBException in InitAndListen, terminating", "attr":{"error":"NonExistentPath: Data directory C:\\data\\db\\ not found. Create by adding the 'storage.dbPath' option in the configuration file."}}
{"t":{"sdate":"2022-03-05T08:44:36.973+05:30"},"s":"I", "c":"CONTROL", "id":4784900, "ctx":"initandlisten", "msg":"Stepping down the ReplicationCoordinator for shutdown", "attr":{"waitTimeMillis":15000}}
{"t":{"sdate":"2022-03-05T08:44:36.973+05:30"},"s":"I", "c":"COMMAND", "id":4784901, "ctx":"initandlisten", "msg":"Shutting down the MirrorMaestro"}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"SHARDING", "id":4784902, "ctx":"initandlisten", "msg":"Shutting down the WaitForMajorityService"}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":20562, "ctx":"initandlisten", "msg":"Shutdown: going to close listening sockets"}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":4784905, "ctx":"initandlisten", "msg":"Shutting down the global connection pool"}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"CONTROL", "id":4784906, "ctx":"initandlisten", "msg":"Shutting down the FlowControlTicketHolder"}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"-", "id":20520, "ctx":"initandlisten", "msg":"Stopping further FlowControl ticket acquisitions."}
{"t":{"sdate":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":4784918, "ctx":"initandlisten", "msg":"Shutting down the ReplicaSetMonitor"}

```

```

C:\Program Files\MongoDB\Server\5.0\bin>
{"t":{"date":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"REPL", "id":"5123008", "ctx":"main", "msg":"Successfully registered PrimaryOnlyService", "attr":{"service":
"TenantMigrationDonorService", "ns":"config.tenantMigrationDonors"}}
{"t":{"date":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"REPL", "id":"5123008", "ctx":"main", "msg":"Successfully registered PrimaryOnlyService", "attr":{"service":
"TenantMigrationRecipientService", "ns":"config.tenantMigrationRecipients"}}
{"t":{"date":"2022-03-05T08:44:36.971+05:30"},"s":"I", "c":"CONTROL", "id":"5945603", "ctx":"main", "msg":"Multi threading initialized"}
{"t":{"date":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":"4615611", "ctx":"initandlisten", "msg":"MongoDB starting", "attr":{"pid":2004, "port":27017, "d
bPath":"C:/data/db/", "architecture":"64-bit", "host":"PC-65"}}
{"t":{"date":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":"23398", "ctx":"initandlisten", "msg":"Target operating system minimum version", "attr":{"ta
rgetMinOS":"Windows 7/Windows Server 2008 R2"}}
{"t":{"date":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":"23403", "ctx":"initandlisten", "msg":"Build Info", "attr":{"buildInfo":{"version":"5.0.6", "
gitVersion":"212a8dbb47f07427dae1949c75baec1d81d9259", "modules":[], "allocator":"tcmalloc", "environment":{"distmod":"windows", "distarch":"x86_64", "target_arch":"x86_64"
}}}
{"t":{"date":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":"51765", "ctx":"initandlisten", "msg":"Operating System", "attr":{"os":{"name":"Microsoft Wi
ndows 10", "version":"10.0 (build 18363)"}}}
{"t":{"date":"2022-03-05T08:44:36.972+05:30"},"s":"I", "c":"CONTROL", "id":"21951", "ctx":"initandlisten", "msg":"Options set by command line", "attr":{"options":{}}}
{"t":{"date":"2022-03-05T08:44:36.973+05:30"},"s":"E", "c":"CONTROL", "id":"20552", "ctx":"initandlisten", "msg":"DBException in initAndListen, terminating", "attr":{"e
rror":"NonExistentPath: Data directory C:\\data\\db\\ not found. Create
by adding the 'storage.dbPath' option in the configuration file.}}
{"t":{"date":"2022-03-05T08:44:36.973+05:30"},"s":"I", "c":"REPL", "id":"4784900", "ctx":"initandlisten", "msg":"Stepping down the ReplicationCoordinator for shutdown",
"attr":{"waitTimeMillis":15000}}
{"t":{"date":"2022-03-05T08:44:36.973+05:30"},"s":"I", "c":"COMMAND", "id":"4784901", "ctx":"initandlisten", "msg":"Shutting down the MirrorMaestro"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"SHARDING", "id":"4784902", "ctx":"initandlisten", "msg":"Shutting down the WaitForMajorityService"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":"20562", "ctx":"initandlisten", "msg":"Shutdown: going to close listening sockets"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":"4784905", "ctx":"initandlisten", "msg":"Shutting down the global connection pool"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"CONTROL", "id":"4784906", "ctx":"initandlisten", "msg":"Shutting down the FlowControlTicketHolder"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"-", "id":"20520", "ctx":"initandlisten", "msg":"Stopping further Flow Control ticket acquisitions."}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"NETWORK", "id":"4784918", "ctx":"initandlisten", "msg":"Shutting down the ReplicaSetMonitor"}
{"t":{"date":"2022-03-05T08:44:36.974+05:30"},"s":"I", "c":"SHARDING", "id":"4784921", "ctx":"initandlisten", "msg":"Shutting down the MigrationUtilExecutor"}
{"t":{"date":"2022-03-05T08:44:36.975+05:30"},"s":"I", "c":"ASIO", "id":"22582", "ctx":"MigrationUtil-TaskExecutor", "msg":"Killing all outstanding egress activity"}
{"t":{"date":"2022-03-05T08:44:36.975+05:30"},"s":"I", "c":"-", "id":"-", "ctx":"-", "msg":"-"}
{"t":{"date":"2022-03-05T08:44:36.975+05:30"},"s":"I", "c":"COMMAND", "id":"4784923", "ctx":"initandlisten", "msg":"Shutting down the ServiceEntryPoint"}
{"t":{"date":"2022-03-05T08:44:36.976+05:30"},"s":"I", "c":"CONTROL", "id":"4784925", "ctx":"initandlisten", "msg":"Shutting down free monitoring"}
{"t":{"date":"2022-03-05T08:44:36.976+05:30"},"s":"I", "c":"CONTROL", "id":"4784927", "ctx":"initandlisten", "msg":"Shutting down the HealthLog"}
{"t":{"date":"2022-03-05T08:44:36.976+05:30"},"s":"I", "c":"CONTROL", "id":"4784928", "ctx":"initandlisten", "msg":"Shutting down the TTL monitor"}
{"t":{"date":"2022-03-05T08:44:36.977+05:30"},"s":"I", "c":"CONTROL", "id":"4784929", "ctx":"initandlisten", "msg":"Acquiring the global lock for shutdown"}
{"t":{"date":"2022-03-05T08:44:36.977+05:30"},"s":"I", "c":"-", "id":"4784931", "ctx":"initandlisten", "msg":"Dropping the scope cache for shutdown"}
{"t":{"date":"2022-03-05T08:44:36.982+05:30"},"s":"I", "c":"FTDC", "id":"4784926", "ctx":"initandlisten", "msg":"Shutting down full-time data capture"}
{"t":{"date":"2022-03-05T08:44:36.986+05:30"},"s":"I", "c":"CONTROL", "id":"20565", "ctx":"initandlisten", "msg":"Now exiting"}
{"t":{"date":"2022-03-05T08:44:36.987+05:30"},"s":"I", "c":"CONTROL", "id":"23138", "ctx":"initandlisten", "msg":"Shutting down", "attr":{"exitCode":100}}

C:\Program Files\MongoDB\Server\5.0\bin>
C:\Program Files\MongoDB\Server\5.0\bin>mongo
MongoDB shell version v5.0.6
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("f5a814d9-6775-4ab4-a8f9-d94a57a7b690") }
MongoDB server version: 5.0.6

Warning: the "mongo" shell has been superseded by "mongosh",
which delivers improved usability and compatibility. The "mongo" shell has been deprecated and will be removed in
an upcoming release.
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
=====
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

---
The server generated these startup warnings when booting:
---
2022-03-05T08:32:24.182+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
---

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.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---

```

Creating a Database in MongoDB:

```

Command Prompt - mongo
C:\Program Files\MongoDB\Server\5.0\bin>mongo
MongoDB shell version v5.0.6
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("f5a814d9-6775-4ab4-a8f9-d94a57a7b690") }
MongoDB server version: 5.0.6
=====
Warning: the "mongo" shell has been superseded by "mongosh",
which delivers improved usability and compatibility. The "mongo" shell has been deprecated and will be removed in
an upcoming release.
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
=====
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
---
The server generated these startup warnings when booting:
2022-03-05T08:32:24.182+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
---
---
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.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> show dbs;
admin    0.000GB
config  0.000GB
local    0.000GB
> use RetailBikeDB
switched to db RetailBikeDB
>

```

Creating and showing collections in MongoDB

```

Command Prompt - mongo
To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> show dbs;
admin    0.000GB
config  0.000GB
local    0.000GB
> use RetailBikeDB
switched to db RetailBikeDB
> db.createCollection("production.categories")
{ "ok" : 1 }
> db.createCollection("production.brands")
{ "ok" : 1 }
> db.createCollection("production.products")
{ "ok" : 1 }
> db.createCollection("production.stocks")
{ "ok" : 1 }
> db.createCollection("sales.stores")
{ "ok" : 1 }
> db.createCollection("sales.staffs")
{ "ok" : 1 }
>
> db.createCollection("sales.customers")
{ "ok" : 1 }
> db.createCollection("sales.orders")
{ "ok" : 1 }
> db.createCollection("sales.order_items")
{ "ok" : 1 }
>

```


We can show list of collection using “Show collections” commands in MongoDB.

```
Command Prompt - mongo
> db.createCollection("production.brands")
{ "ok" : 1 }
> db.createCollection("production.products")
{ "ok" : 1 }
> db.createCollection("production.stocks")
{ "ok" : 1 }
> db.createCollection("sales.stores")
{ "ok" : 1 }
> db.createCollection("sales.staffs")
{ "ok" : 1 }
>
> db.createCollection("sales.customers")
{ "ok" : 1 }
> db.createCollection("sales.orders")
{ "ok" : 1 }
> db.createCollection("sales.order_items")
{ "ok" : 1 }
> show collections
production.brands
production.categories
production.products
production.stocks
sales.customers
sales.order_items
sales.orders
sales.staffs
sales.stores
>
```

Crud Operations:

Create Operations:

production.categories

```
Command Prompt - mongo
> db.production.categories.insertMany(
... {
...   "category_id": 1,
...   "category_name": "Road Bike"
... },
... {
...   "category_id": 2,
...   "category_name": "Mountain Bike"
... },
... {
...   "category_id": 3,
...   "category_name": "Hybrid Bike"
... },
... {
...   "category_id": 4,
...   "category_name": "Folding Bike"
... },
... {
...   "category_id": 5,
...   "category_name": "Touring Bike"
... },
... {
...   "category_id": 6,
...   "category_name": "Cruiser Bike"
... },
... {
...   "category_id": 7,
...   "category_name": "Women Bike"
... }
... ]
... )
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("6222d8a462698b36caaa7571"),
    ObjectId("6222d8a462698b36caaa7572"),
    ObjectId("6222d8a462698b36caaa7573"),
    ObjectId("6222d8a462698b36caaa7574"),
    ObjectId("6222d8a462698b36caaa7575"),
    ObjectId("6222d8a462698b36caaa7576"),
    ObjectId("6222d8a462698b36caaa7577")
  ]
}
```

production.products

```
Command Prompt - mongo
> db.production.products.insertMany(
... {
... {
... "product_id": 1,
... "product_name": "Honda Superfast",
... "brand_id": 1,
... "category_id": 1,
... "model_year": 1994,
... "list_price": 25000
... },
... {
... "product_id": 2,
... "product_name": "6KU Bikes",
... "brand_id": 2,
... "category_id": 4,
... "model_year": 2000,
... "list_price": 30000
... },
... {
... "product_id": 3,
... "product_name": "Bianchi",
... "brand_id": 3,
... "category_id": 2,
... "model_year": 2002,
... "list_price": 30000
... },
... {
... "product_id": 4,
... "product_name": "BMC Hybrid Bike",
... "brand_id": 4,
... "category_id": 3,
... "model_year": 2009,
... "list_price": 45000
... },
... {
... "product_id": 5,
... "product_name": "Huffy Women Bike",
... "brand_id": 5,
... "category_id": 7,
... "model_year": 2019,
... "list_price": 50000
... }
... }
... )

Command Prompt - mongo
... {
... "product_name": "6KU Bikes",
... "brand_id": 2,
... "category_id": 4,
... "model_year": 2000,
... "list_price": 30000
... },
... {
... "product_id": 3,
... "product_name": "Bianchi",
... "brand_id": 3,
... "category_id": 2,
... "model_year": 2002,
... "list_price": 30000
... },
... {
... "product_id": 4,
... "product_name": "BMC Hybrid Bike",
... "brand_id": 4,
... "category_id": 3,
... "model_year": 2009,
... "list_price": 45000
... },
... {
... "product_id": 5,
... "product_name": "Huffy Women Bike",
... "brand_id": 5,
... "category_id": 7,
... "model_year": 2019,
... "list_price": 50000
... }
... }
... ]
... )
{
  "acknowledged": true,
  "insertedIds": [
    ObjectId("6222d94962698b36caaa7578"),
    ObjectId("6222d94962698b36caaa7579"),
    ObjectId("6222d94962698b36caaa757a"),
    ObjectId("6222d94962698b36caaa757b"),
    ObjectId("6222d94962698b36caaa757c")
  ]
}
```

production.stocks

```
Command Prompt - mongo
> db.production.stocks.insertMany(
... [
... {
...   "store_id": 1,
...   "product_id": 1,
...   "quantity": 15
... },
... {
...   "store_id": 2,
...   "product_id": 4,
...   "quantity": 20
... },
... {
...   "store_id": 3,
...   "product_id": 5,
...   "quantity": 30
... },
... {
...   "store_id": 1,
...   "product_id": 5,
...   "quantity": 100
... },
... {
...   "store_id": 2,
...   "product_id": 2,
...   "quantity": 4
... },
... {
...   "store_id": 3,
...   "product_id": 3,
...   "quantity": 9
... }
... ]
... )
{
  "acknowledged": true,
  "insertedIds": [
    ObjectId("6222d96762698b36caaa757d"),
    ObjectId("6222d96762698b36caaa757e"),
    ObjectId("6222d96762698b36caaa757f"),
    ObjectId("6222d96762698b36caaa7580"),
    ObjectId("6222d96762698b36caaa7581"),
    ObjectId("6222d96762698b36caaa7582")
  ]
}
```

sales.customers

```
Command Prompt - mongo
> db.sales.customers.insertMany(
... [
... {
...   "customer_id": "Cus001",
...   "first_name": "Jay",
...   "last_name": "Mehta",
...   "phone": "1234567890",
...   "email": "jay@gmail.com",
...   "street": "T.P. Road",
...   "city": "Mumbai",
...   "state": "Maharashtra",
...   "zip_code": 400072
... },
... {
...   "customer_id": "Cus002",
...   "first_name": "Ruhi",
...   "last_name": "Singh",
...   "phone": "7894561230",
...   "email": "ruhi@yahoo.com",
...   "street": "M.G. Chauk",
...   "city": "Mumbai",
...   "state": "Maharashtra",
...   "zip_code": 400072
... },
... {
...   "customer_id": "Cus003",
...   "first_name": "Aria",
...   "last_name": "Josh",
...   "phone": "1245789630",
...   "email": "aria.josh@gmail.com",
...   "street": "JVM",
...   "city": "Gandhi Nagar",
...   "state": "Gujrat",
...   "zip_code": 401235
... },
... {
...   "customer_id": "Cus004",
...   "first_name": "Mahi",
...   "last_name": "Kaur",
...   "phone": "4567890123",
...   "email": "kaur.mahi@hotmail.com",
... }
... ]
... )
```

sales.order_items

```

Command Prompt - mongo
... "street": "JVM",
... "city": "Gandhi Nagar",
...
... "state": "Gujrat",
... "zip_code": 401235
... },
... {
... "customer_id": "Cus004",
... "first_name": "Mahi",
... "last_name": "Kaur",
... "phone": 4567890123,
... "email": "kaun.mahi@hotmail.com",
... "street": "J.V.L.R",
... "city": "Mumbai",
... "state": "Maharashtra",
... "zip_code": 400072
... },
... {
... "customer_id": "Cus005",
... "first_name": "Aditya",
... "last_name": "Yadav",
... "phone": 9638527410,
... "email": "aditya@gmail.com",
... "street": "Koliwada",
... "city": "Pune",
... "state": "Maharashtra",
... "zip_code": 300075
... }
... }
... )
... )
{
  "acknowledged": true,
  "insertedIds": [
    ObjectId("6222d99d62698b36caaa7583"),
    ObjectId("6222d99d62698b36caaa7584"),
    ObjectId("6222d99d62698b36caaa7585"),
    ObjectId("6222d99d62698b36caaa7586"),
    ObjectId("6222d99d62698b36caaa7587")
  ]
}

```

sales.orders

```

Command Prompt - mongo
... ObjectId("6222d9ca62698b36caaa758c")
... ]
}
> db.sales.orders.insertMany(
... {
... "order_id": "ORD001",
... "customer_id": "Cus001",
... "order_status": "Completed",
... "order_date": 43992,
... "shipped_date": 43994,
... "store_id": 1,
... "staff_id": 1
... },
... {
... "order_id": "ORD002",
... "customer_id": "Cus002",
... "order_status": "Completed",
... "order_date": 44221,
... "shipped_date": 44227,
... "store_id": 2,
... "staff_id": 2
... },
... {
... "order_id": "ORD003",
... "customer_id": "Cus003",
... "order_status": "Completed",
... "order_date": 44306,
... "shipped_date": 44314,
... "store_id": 2,
... "staff_id": 2
... },
... },
... {
... "order_id": "ORD004",
... "customer_id": "Cus004",
... "order_status": "Pending",
... "order_date": 44367,
... "shipped_date": 44377,
... "store_id": 3,
... "staff_id": 3
... },
... {
... "order_id": "ORD005",

```

```

Command Prompt - mongo
... "order_id": "ORD003",
... "customer_id": "Cus003",
... "order_status": "Completed",
... "order_date": 44306,
... "shipped_date": 44314,
... "store_id": 2,
... "staff_id": 2
...
... },
... {
... "order_id": "ORD004",
... "customer_id": "Cus004",
... "order_status": "Pending",
... "order_date": 44367,
... "shipped_date": 44377,
... "store_id": 3,
... "staff_id": 3
... },
... {
... "order_id": "ORD005",
... "customer_id": "Cus005",
... "order_status": "Pending",
... "order_date": 44367,
... "shipped_date": 44377,
... "store_id": 1,
... "staff_id": 1
... }
... ]
... )
...
    "acknowledged" : true,
    "insertedIds" : [
      ObjectId("6222da0762698b36caaa758d"),
      ObjectId("6222da0762698b36caaa758e"),
      ObjectId("6222da0762698b36caaa758f"),
      ObjectId("6222da0762698b36caaa7590"),
      ObjectId("6222da0762698b36caaa7591")
    ]
  }
}

```

sales.staffs

```

Command Prompt - mongo
> db.sales.staffs.insertMany(
... {
... {
... "staff_id": 1,
... "first_name": "Pushpa",
... "last_name": "Yadav",
... "email": "pushpa@gmail.com",
... "phone": 9999999999,
... "active": "Yes",
... "store_id": 1,
... "manager_id": 1
... },
... {
... "staff_id": 2,
... "first_name": "Sadiksha",
... "last_name": "Singh",
... "email": "sadiksha@gmail.com",
... "phone": 8888888888,
... "active": "Yes",
... "store_id": 2,
... "manager_id": 1
... },
... {
... "staff_id": 3,
... "first_name": "Priya",
... "last_name": "Nadar",
... "email": "priya@gmail.com",
... "phone": 7777777777,
... "active": "Yes",
... "store_id": 3,
... "manager_id": 1
... }
... }
... ]
... )
...
    "acknowledged" : true,
    "insertedIds" : [
      ObjectId("6222da4862698b36caaa7592"),
      ObjectId("6222da4862698b36caaa7593"),
      ObjectId("6222da4862698b36caaa7594")
    ]
  }
}

```

sales.stores

```
Command Prompt - mongo
> db.sales.stores.insertMany(
... [
... {
...   "store_id": 1,
...   "store_name": "Ambika Showroom",
...   "phone": 123456,
...   "email": "ambika@gmail.com",
...   "street": "GP",
...   "city": "Mumbai",
...   "state": "Maharashtra",
...   "zip_code": 400072
... },
... {
...   "store_id": 2,
...   "store_name": "Yash Bikes",
...   "phone": 789456,
...   "email": "yash.bikes@yahoo.com",
...   "street": "M.G",
...   "city": "Pune",
...   "state": "Maharashtra",
...   "zip_code": 300075
... },
... {
...   "store_id": 3,
...   "store_name": "Josh Automobiles",
...   "phone": 456983,
...   "email": "josh@gmail.com",
...   "street": "M.G",
...   "city": "Gandhi Nagar",
...   "state": "Gujrat",
...   "zip_code": 401235
... }
... ]
... )
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("6222da6062698b36caaa7595"),
    ObjectId("6222da6062698b36caaa7596"),
    ObjectId("6222da6062698b36caaa7597")
  ]
}
```

production.brands

```
Command Prompt - mongo
... ]
... )
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("6222db1b62698b36caaa7598"),
    ObjectId("6222db1b62698b36caaa7599"),
    ObjectId("6222db1b62698b36caaa759a"),
    ObjectId("6222db1b62698b36caaa759b"),
    ObjectId("6222db1b62698b36caaa759c")
  ]
}
```

Read Operations

```

Command Prompt - mongo
> db.production.brands.find()
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
{ "_id" : ObjectId("6222db1b62698b36caaa7599"), "brand_id" : 2, "brand_name" : "6KU Bikes" }
{ "_id" : ObjectId("6222db1b62698b36caaa759a"), "brand_id" : 3, "brand_name" : "Bianchi" }
{ "_id" : ObjectId("6222db1b62698b36caaa759b"), "brand_id" : 4, "brand_name" : "BMC" }
{ "_id" : ObjectId("6222db1b62698b36caaa759c"), "brand_id" : 5, "brand_name" : "Huffy" }
> db.production.brands.find({"brand_name" : "Honda"})
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
> db.sales.order_items.findOne({"quantity": 2})
{
  "_id" : ObjectId("6222d9ca62698b36caaa7588"),
  "order_id" : "ORD001",
  "product_id" : 1,
  "quantity" : 2,
  "list_price" : 50000
}
> db.production.products.find()
{ "_id" : ObjectId("6222d94962698b36caaa7578"), "product_id" : 1, "product_name" : "Honda Superfast", "brand_id" : 1, "category_id" : 1, "model_year" : 1994, "list_price" : 25000 }
{ "_id" : ObjectId("6222d94962698b36caaa7579"), "product_id" : 2, "product_name" : "6KU Bikes", "brand_id" : 2, "category_id" : 4, "model_year" : 2000, "list_price" : 30000 }
{ "_id" : ObjectId("6222d94962698b36caaa757a"), "product_id" : 3, "product_name" : "Bianchi", "brand_id" : 3, "category_id" : 2, "model_year" : 2002, "list_price" : 30000 }
{ "_id" : ObjectId("6222d94962698b36caaa757b"), "product_id" : 4, "product_name" : "BMC Hybrid Bike", "brand_id" : 4, "category_id" : 3, "model_year" : 2009, "list_price" : 45000 }
{ "_id" : ObjectId("6222d94962698b36caaa757c"), "product_id" : 5, "product_name" : "Huffy Women Bike", "brand_id" : 5, "category_id" : 7, "model_year" : 2019, "list_price" : 50000 }
> db.production.products.find({"list_price": 30000})
{ "_id" : ObjectId("6222d94962698b36caaa7579"), "product_id" : 2, "product_name" : "6KU Bikes", "brand_id" : 2, "category_id" : 4, "model_year" : 2000, "list_price" : 30000 }
{ "_id" : ObjectId("6222d94962698b36caaa757a"), "product_id" : 3, "product_name" : "Bianchi", "brand_id" : 3, "category_id" : 2, "model_year" : 2002, "list_price" : 30000 }
>
> db.sales.customers.find()
{ "_id" : ObjectId("6222d99d62698b36caaa7583"), "customer_id" : "Cus001", "first_name" : "Jay", "last_name" : "Mehta", "phone" : 1234567890, "email" : "jay@gmail.com", "street" : "T.P Road", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7584"), "customer_id" : "Cus002", "first_name" : "Ruhi", "last_name" : "Singh", "phone" : 7894561230, "email" : "ruhi@yahoo.com", "street" : "M.G Chauk", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7585"), "customer_id" : "Cus003", "first_name" : "Aria", "last_name" : "Josh", "phone" : 1245789630, "email" : "aria.josh@gmail.com", "street" : "J.V.M", "city" : "Gandhi Nagar", "state" : "Gujrat", "zip_code" : 401235 }
{ "_id" : ObjectId("6222d99d62698b36caaa7586"), "customer_id" : "Cus004", "first_name" : "Mahi", "last_name" : "Kaur", "phone" : 4567890123, "email" : "kaur.mahi@hotmail.com", "street" : "J.V.L.R", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7587"), "customer_id" : "Cus005", "first_name" : "Aditya", "last_name" : "Yadav", "phone" : 9638527410, "email" : "aditya@gmail.com", "street" : "Koliwada", "city" : "Pune", "state" : "Maharashtra", "zip_code" : 300075 }
> db.sales.customers.find({"city": {"$in": ["Mumbai", "Pune"]}})
{ "_id" : ObjectId("6222d99d62698b36caaa7583"), "customer_id" : "Cus001", "first_name" : "Jay", "last_name" : "Mehta", "phone" : 1234567890, "email" : "jay@gmail.com", "street" : "T.P Road", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7584"), "customer_id" : "Cus002", "first_name" : "Ruhi", "last_name" : "Singh", "phone" : 7894561230, "email" : "ruhi@yahoo.com", "street" : "M.G Chauk", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7586"), "customer_id" : "Cus004", "first_name" : "Mahi", "last_name" : "Kaur", "phone" : 4567890123, "email" : "kaur.mahi@hotmail.com", "street" : "J.V.L.R", "city" : "Mumbai", "state" : "Maharashtra", "zip_code" : 400072 }
{ "_id" : ObjectId("6222d99d62698b36caaa7587"), "customer_id" : "Cus005", "first_name" : "Aditya", "last_name" : "Yadav", "phone" : 9638527410, "email" : "aditya@gmail.com", "street" : "Koliwada", "city" : "Pune", "state" : "Maharashtra", "zip_code" : 300075 }
>

```

```

Command Prompt - mongo
> db.sales.order_items.find()
{"_id": "ObjectId('6222d9ca62698b36caa7588')", "order_id": "ORD001", "product_id": 1, "quantity": 2, "list_price": 50000 }
{"_id": "ObjectId('6222d9ca62698b36caa7589')", "order_id": "ORD002", "product_id": 2, "quantity": 3, "list_price": 90000 }
{"_id": "ObjectId('6222d9ca62698b36caa758a')", "order_id": "ORD003", "product_id": 3, "quantity": 1, "list_price": 30000 }
{"_id": "ObjectId('6222d9ca62698b36caa758b')", "order_id": "ORD004", "product_id": 4, "quantity": 8, "list_price": 360000 }
{"_id": "ObjectId('6222d9ca62698b36caa758c')", "order_id": "ORD005", "product_id": 5, "quantity": 2, "list_price": 100000 }
> db.sales.order_items.find((quantity: 2, list_price: { $gt: 70000}))
{"_id": "ObjectId('6222d9ca62698b36caa758c')", "order_id": "ORD005", "product_id": 5, "quantity": 2, "list_price": 100000 }
> db.production.products.find()
{"_id": "ObjectId('6222d94962698b36caa7578')", "product_id": 1, "product_name": "Honda Superfast", "brand_id": 1, "category_id": 1, "model_year": 1994, "list_price": 25000 }
{"_id": "ObjectId('6222d94962698b36caa7579')", "product_id": 2, "product_name": "6KU Bikes", "brand_id": 2, "category_id": 4, "model_year": 2000, "list_price": 30000 }
{"_id": "ObjectId('6222d94962698b36caa757a')", "product_id": 3, "product_name": "Bianchi", "brand_id": 3, "category_id": 2, "model_year": 2002, "list_price": 30000 }
{"_id": "ObjectId('6222d94962698b36caa757b')", "product_id": 4, "product_name": "BMC Hybrid Bike", "brand_id": 4, "category_id": 3, "model_year": 2009, "list_price": 45000 }
{"_id": "ObjectId('6222d94962698b36caa757c')", "product_id": 5, "product_name": "Huffy Women Bike", "brand_id": 5, "category_id": 7, "model_year": 2019, "list_price": 50000 }
> db.production.products.find({ $or: [ { product_name: "Honda Superfast" }, { model_year : { $lt: ... 2003 } } ] })
{"_id": "ObjectId('6222d94962698b36caa7578')", "product_id": 1, "product_name": "Honda Superfast", "brand_id": 1, "category_id": 1, "model_year": 1994, "list_price": 25000 }
{"_id": "ObjectId('6222d94962698b36caa7579')", "product_id": 2, "product_name": "6KU Bikes", "brand_id": 2, "category_id": 4, "model_year": 2000, "list_price": 30000 }
{"_id": "ObjectId('6222d94962698b36caa757a')", "product_id": 3, "product_name": "Bianchi", "brand_id": 3, "category_id": 2, "model_year": 2002, "list_price": 30000 }
>

```

```

Command Prompt - mongo
> db.sales.staffs.find()
{"_id": "ObjectId('6222da4862698b36caa7592')", "staff_id": 1, "first_name": "Pushpa", "last_name": "Yadav", "email": "pushpa@gmail.com", "phone": 999999999, "active": "Yes", "store_id": 1, "manager_id": 1 }
{"_id": "ObjectId('6222da4862698b36caa7593')", "staff_id": 2, "first_name": "Sadiksha", "last_name": "Singh", "email": "sadiksha@gmail.com", "phone": 8888888888, "active": "Yes", "store_id": 2, "manager_id": 1 }
{"_id": "ObjectId('6222da4862698b36caa7594')", "staff_id": 3, "first_name": "Priya", "last_name": "Nadar", "email": "priya@gmail.com", "phone": 7777777777, "active": "Yes", "store_id": 3, "manager_id": 1 }
> db.sales.staffs.updateOne({first_name: "Pushpa"}, {$set:{phone: 999999998}})
{"acknowledged": true, "matchedCount": 1, "modifiedCount": 1 }
> db.sales.orders.find()
{"_id": "ObjectId('6222da0762698b36caa758d')", "order_id": "ORD001", "customer_id": "Cus001", "order_status": "Completed", "order_date": 43992, "shipped_date": 43994, "store_id": 1, "staff_id": 1 }
{"_id": "ObjectId('6222da0762698b36caa758e')", "order_id": "ORD002", "customer_id": "Cus002", "order_status": "Completed", "order_date": 44221, "shipped_date": 44227, "store_id": 2, "staff_id": 2 }
{"_id": "ObjectId('6222da0762698b36caa758f')", "order_id": "ORD003", "customer_id": "Cus003", "order_status": "Completed", "order_date": 44306, "shipped_date": 44314, "store_id": 2, "staff_id": 2 }
{"_id": "ObjectId('6222da0762698b36caa7590')", "order_id": "ORD004", "customer_id": "Cus004", "order_status": "Pending", "order_date": 44367, "shipped_date": 44377, "store_id": 3, "staff_id": 3 }
{"_id": "ObjectId('6222da0762698b36caa7591')", "order_id": "ORD005", "customer_id": "Cus005", "order_status": "Pending", "order_date": 44367, "shipped_date": 44377, "store_id": 1, "staff_id": 1 }
> db.sales.orders.updateMany({shipped_date:44377}, {$set: {shipped_date: "1-July-2021"}})
{"acknowledged": true, "matchedCount": 2, "modifiedCount": 2 }
>

```



```
Command Prompt - mongo
> db.production.brands.find()
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
{ "_id" : ObjectId("6222db1b62698b36caaa7599"), "brand_id" : 2, "brand_name" : "GKU Bikes" }
{ "_id" : ObjectId("6222db1b62698b36caaa759a"), "brand_id" : 3, "brand_name" : "Bianchi" }
{ "_id" : ObjectId("6222db1b62698b36caaa759b"), "brand_id" : 4, "brand_name" : "BMC" }
{ "_id" : ObjectId("6222db1b62698b36caaa759c"), "brand_id" : 5, "brand_name" : "Huffy" }
> db.production.brands.deleteOne({brand_id:5})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.production.brands.find()
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
{ "_id" : ObjectId("6222db1b62698b36caaa7599"), "brand_id" : 2, "brand_name" : "GKU Bikes" }
{ "_id" : ObjectId("6222db1b62698b36caaa759a"), "brand_id" : 3, "brand_name" : "Bianchi" }
{ "_id" : ObjectId("6222db1b62698b36caaa759b"), "brand_id" : 4, "brand_name" : "BMC" }
>

Command Prompt - mongo
> db.production.brands.find()
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
{ "_id" : ObjectId("6222db1b62698b36caaa7599"), "brand_id" : 2, "brand_name" : "GKU Bikes" }
{ "_id" : ObjectId("6222db1b62698b36caaa759a"), "brand_id" : 3, "brand_name" : "Bianchi" }
{ "_id" : ObjectId("6222db1b62698b36caaa759b"), "brand_id" : 4, "brand_name" : "BMC" }
> db.production.brands.deleteMany({brand_id: {>: 3}})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.production.brands.find()
{ "_id" : ObjectId("6222db1b62698b36caaa7598"), "brand_id" : 1, "brand_name" : "Honda" }
{ "_id" : ObjectId("6222db1b62698b36caaa7599"), "brand_id" : 2, "brand_name" : "GKU Bikes" }
{ "_id" : ObjectId("6222db1b62698b36caaa759a"), "brand_id" : 3, "brand_name" : "Bianchi" }
>
```

Example 2