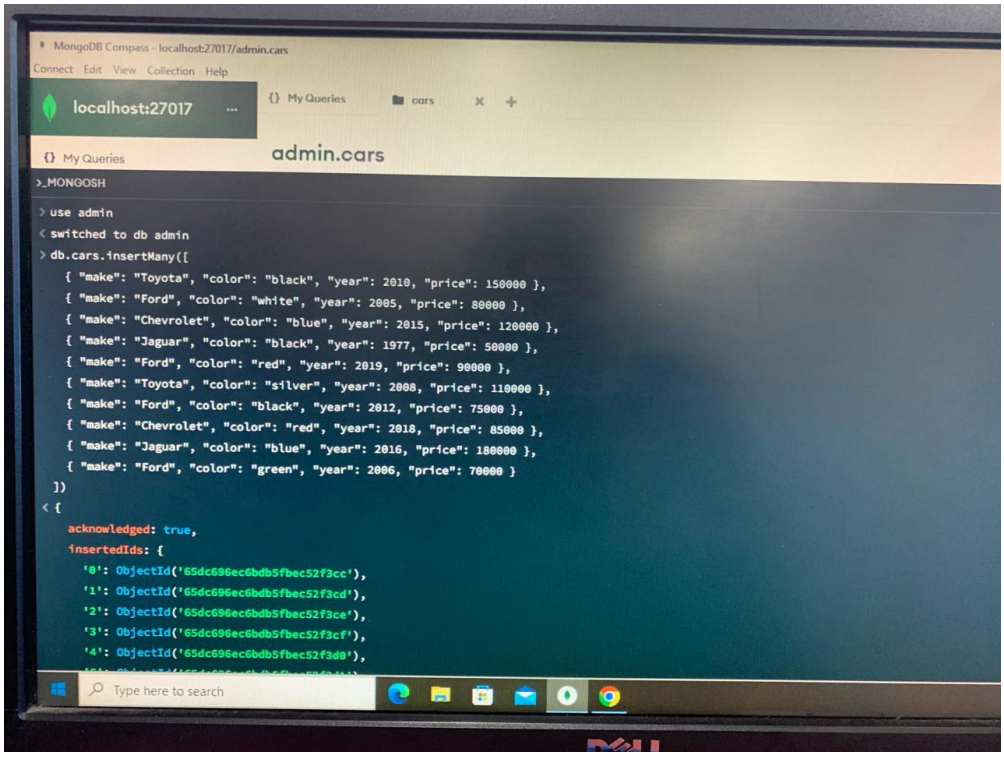
Assignment 9: MongoDB - CRUD

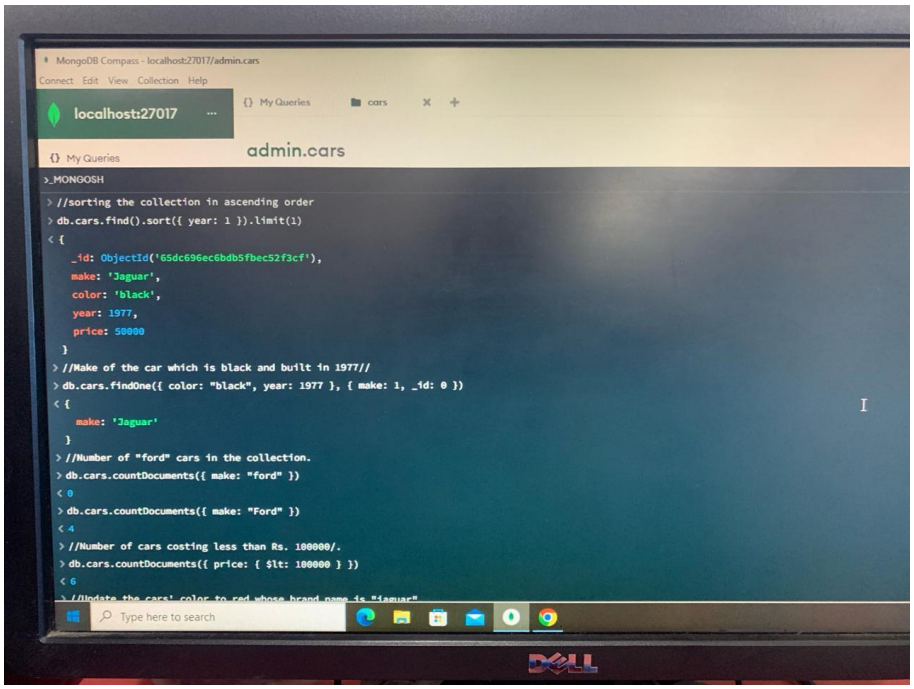
Theory:

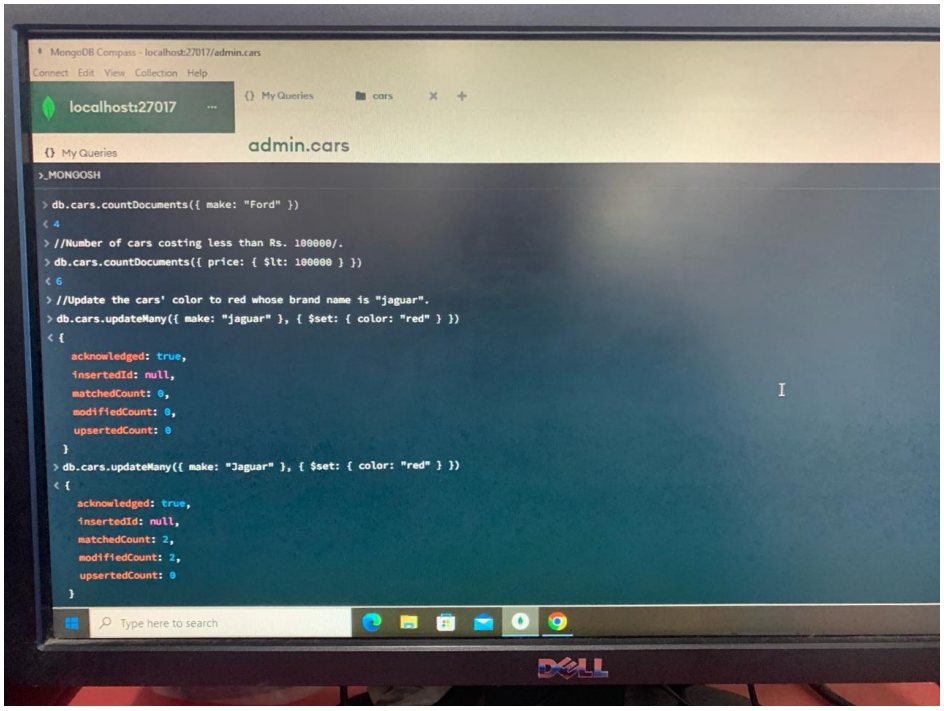
In MongoDB's command line interface (CLI), users interact directly with the database using simple commands. Starting with the `mongo` command, users connect to MongoDB and select a specific database using `use <database_name>`. Querying data involves the straightforward `db.<collection_name>.find()` command, while updating documents is achieved through `db.<collection_name>.update()`.

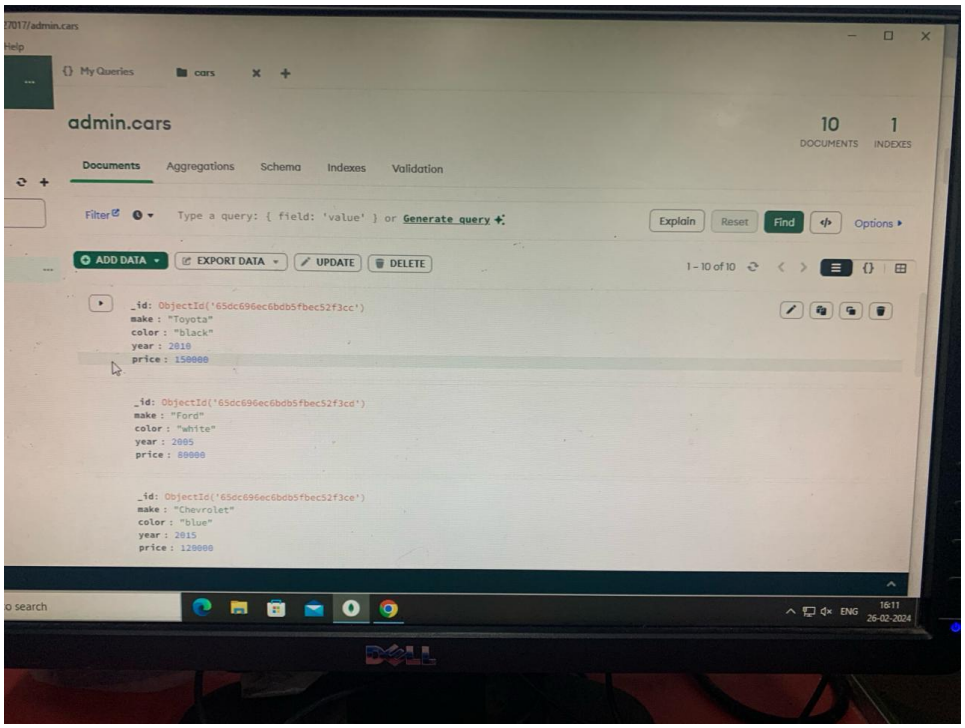
For more complex operations, such as aggregation, users employees, `db.<collection_name>.aggregate()`. Miscellaneous tasks, like deleting documents or counting entries, are handled with appropriate commands. Once tasks are completed, users exit the MongoDB CLI by typing `exit`. This direct approach allows for efficient management and manipulation of data without the need for additional tools or interfaces.

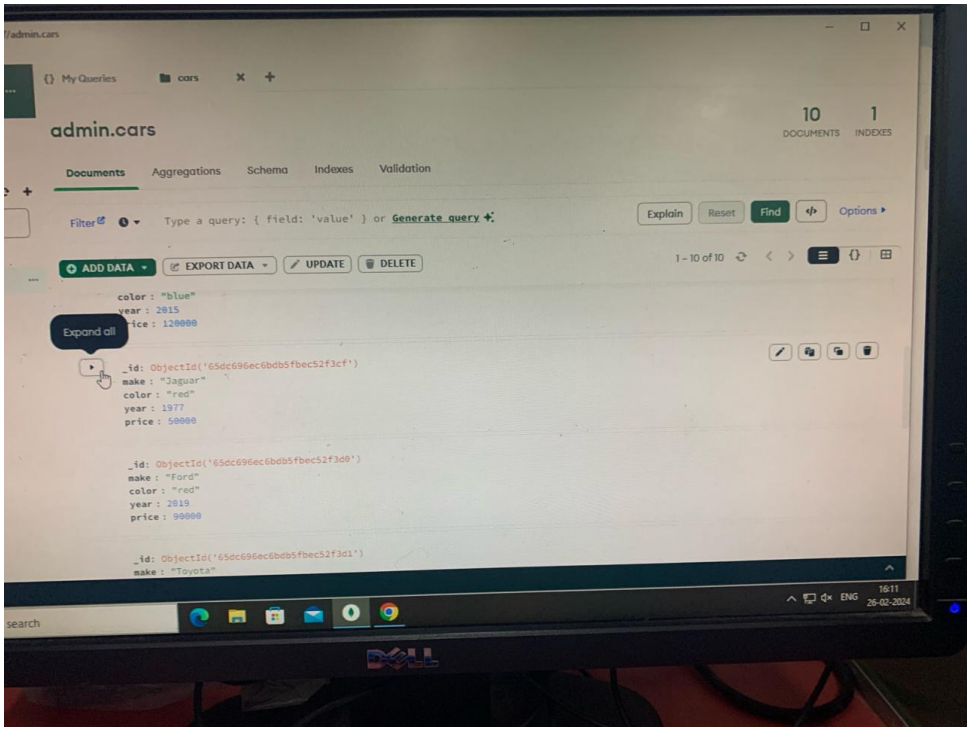
Commands and outputs-






MongoDB Compass - localhost:27017/admin.cars
Connect Edit View Collection Help
localhost:27017
My Queries
cars
admin.cars
>_MONGOSH
> db.cars.countDocuments({ make: "Ford" })
< 4
> //Number of cars costing less than Rs. 100000/.
> db.cars.countDocuments({ price: { $lt: 100000 } })
< 6
> //Update the cars' color to red whose brand name is "jaguar".
> db.cars.updateMany({ make: "jaguar" }, { $set: { color: "red" } })
< {
acknowledged: true,
insertedId: null,
matchedCount: 0,
modifiedCount: 0,
upsertedCount: 0
}
> db.cars.updateMany({ make: "Jaguar" }, { $set: { color: "red" } })
< {
acknowledged: true,
insertedId: null,
matchedCount: 2,
modifiedCount: 2,
upsertedCount: 0
}
Type here to search
DELL


My Queries
cars
admin.cars
10 DOCUMENTS
1 INDEXES
Documents
Aggregations
Schema
Indexes
Validation
Filter
Type a query: { field: 'value' } or Generate query
Explain
Reset
Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
1 - 10 of 10
_id: ObjectId('65dc696ec6bdb5fbec52f3cc')
make : "Toyota"
color : "black"
year : 2010
price : 150000
_id: ObjectId('65dc696ec6bdb5fbec52f3cd')
make : "Ford"
color : "white"
year : 2005
price : 80000
_id: ObjectId('65dc696ec6bdb5fbec52f3ce')
make : "Chevrolet"
color : "blue"
year : 2015
price : 120000
ENG
16:11
26-02-2024
DELL


admin.cars
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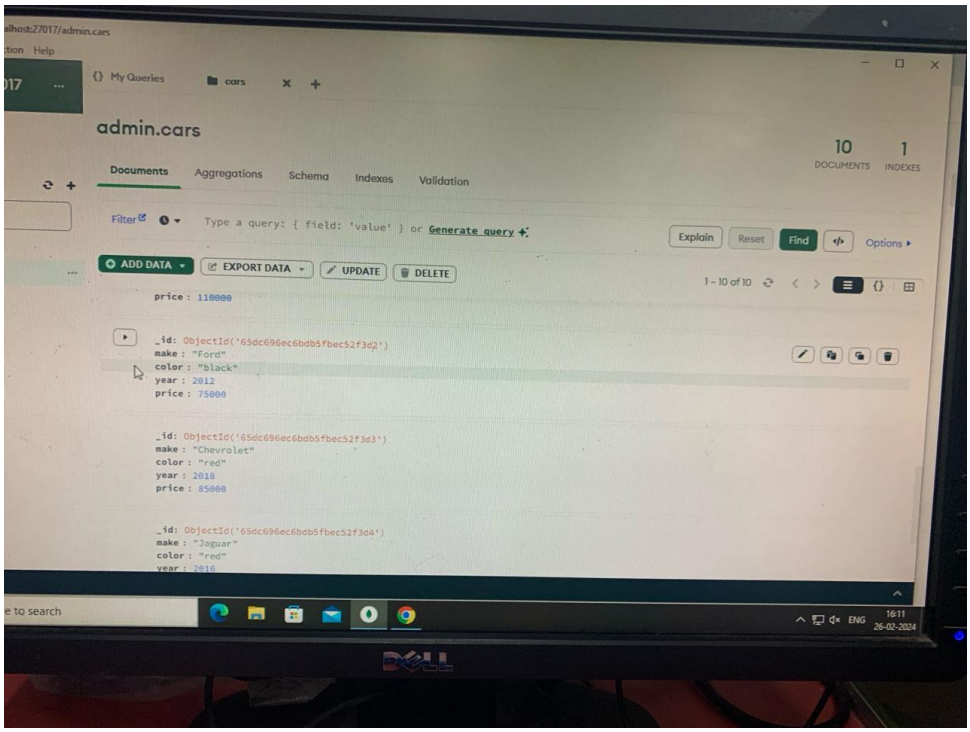
Type a query: { field: 'value' } or Generate query
Explain
Reset
Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
1 - 10 of 10
Expand all
color : "blue"
year : 2015
price : 120000
_id: ObjectId('65dc696ec6bdb5fbec52f3cf')
make : "Jaguar"
color : "red"
year : 1977
price : 50000
_id: ObjectId('65dc696ec6bdb5fbec52f3d0')
make : "Ford"
color : "red"
year : 2019
price : 90000
_id: ObjectId('65dc696ec6bdb5fbec52f3d1')
make : "Toyota"
search
ENG
16:11
26-02-2024


admin.cars
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Type a query: { field: 'value' } or Generate query
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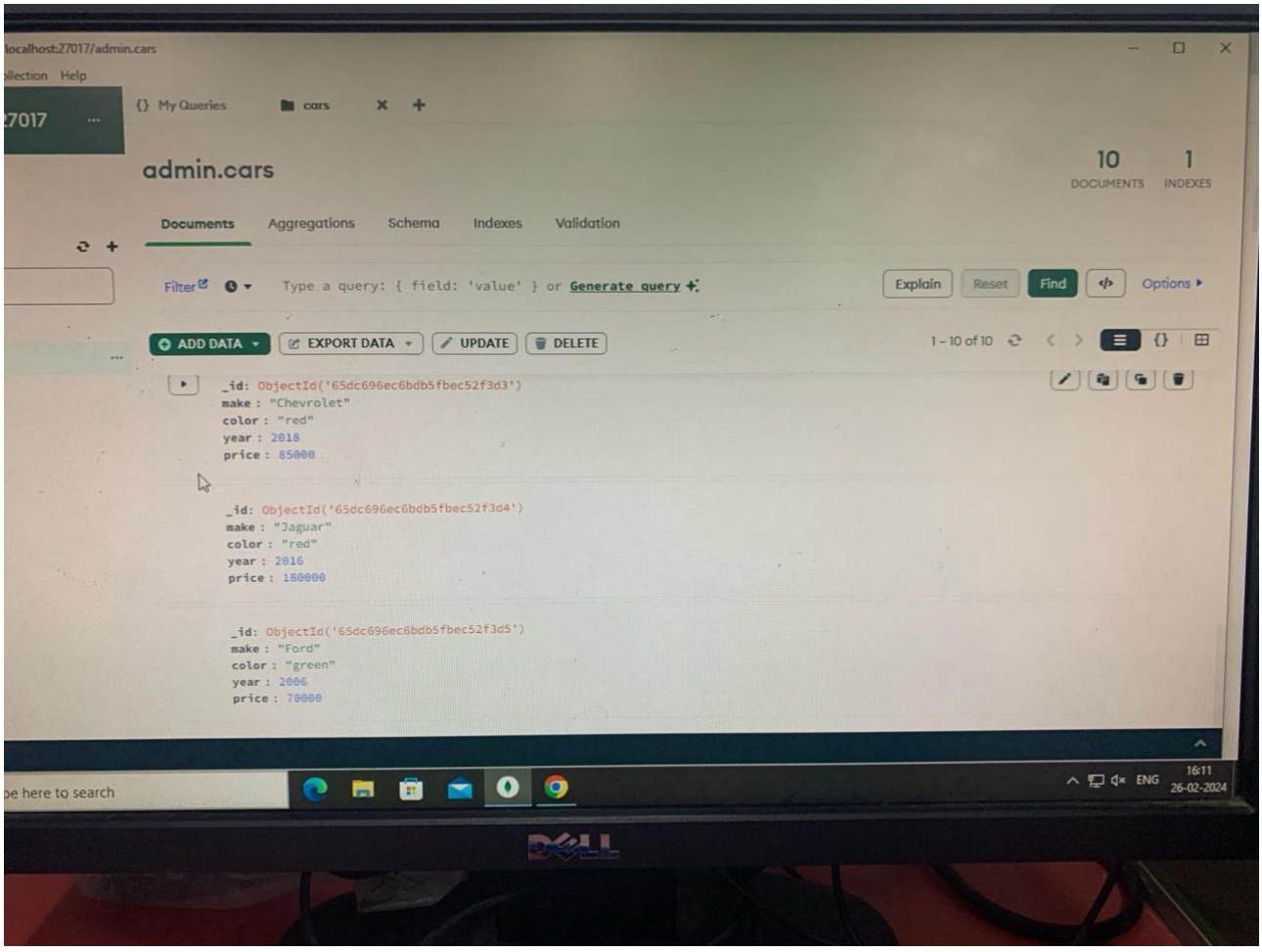
EXPORT DATA
UPDATE
DELETE
1 - 10 of 10
price : 110000
_id: ObjectId('65dc696ec6bdb5fbec52f3d2')
make : "Ford"
color : "black"
year : 2012
price : 75000
_id: ObjectId('65dc696ec6bdb5fbec52f3d3')
make : "Chevrolet"
color : "red"
year : 2018
price : 85000
_id: ObjectId('65dc696ec6bdb5fbec52f3d4')
make : "Jaguar"
color : "red"
year : 2016
ENG
16:11
26-02-2024


localhost:27017/admin.cars
llection Help
27017
My Queries
cars
admin.cars
10 DOCUMENTS
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Aggregations
Schema
Indexes
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Filter
Type a query: { field: 'value' } or Generate query
Explain
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Find
Options
ADD DATA
EXPORT DATA
UPDATE
DELETE
1 - 10 of 10
_id: ObjectId('65dc696ec6bdb5fbec52f3d3')
make : "Chevrolet"
color : "red"
year : 2018
price : 85000
_id: ObjectId('65dc696ec6bdb5fbec52f3d4')
make : "Jaguar"
color : "red"
year : 2016
price : 180000
_id: ObjectId('65dc696ec6bdb5fbec52f3d5')
make : "Ford"
color : "green"
year : 2006
price : 70000
pe here to search
ENG
16:11
26-02-2024