

Experiment10

Code:

```
Last login: Fri Nov  7 09:32:01 on console
[~]$ mongosh
```

```
Current Mongosh Log ID: 6911a8a2e3d38bbe28e1475e
Connecting to:
mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&ap
pName=mongosh+2.5.6
Using MongoDB:      8.0.12
Using Mongosh:      2.5.6
```

For mongosh info see: <https://www.mongodb.com/docs/mongodb-shell/>

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (<https://www.mongodb.com/legal/privacy-policy>).
You can opt-out by running the `disableTelemetry()` command.

```
-----
The server generated these startup warnings when booting
2025-11-07T09:32:14.795+05:30: Access control is not enabled for the database. Read and
write access to data and configuration is unrestricted
-----
```

```
test> use car_dealership
|
| switched to db car_dealership
car_dealership> db.createCollection("cars")
|
| { ok: 1 }
car_dealership> db.cars.insertOne({
|   maker: "Tata",
|   model: "Nexon",
|   fuel_type: "Petrol",
|   price: 900000
| })
|
{
  acknowledged: true,
  insertedId: ObjectId('6911a8dfe3d38bbe28e1475f')
}
car_dealership> db.cars.insertMany([
| { maker: "Hyundai", model: "Creta", fuel_type: "Diesel", price: 1500000 },
```

```
| { maker: "Maruti", model: "Swift", fuel_type: "Petrol", price: 800000 },
| { maker: "Kia",   model: "Sonet", fuel_type: "Petrol", price: 1000000 }
| ])
|
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6911a8e8e3d38bbe28e14760'),
    '1': ObjectId('6911a8e8e3d38bbe28e14761'),
    '2': ObjectId('6911a8e8e3d38bbe28e14762')
  }
}
car_dealership> show collections
| db.cars.countDocuments()
|
cars
car_dealership> db.cars.find().pretty()
|
[
{
  _id: ObjectId('6911a8dfe3d38bbe28e1475f'),
  maker: 'Tata',
  model: 'Nexon',
  fuel_type: 'Petrol',
  price: 900000
},
{
  _id: ObjectId('6911a8e8e3d38bbe28e14760'),
  maker: 'Hyundai',
  model: 'Creta',
  fuel_type: 'Diesel',
  price: 1500000
},
{
  _id: ObjectId('6911a8e8e3d38bbe28e14761'),
  maker: 'Maruti',
  model: 'Swift',
  fuel_type: 'Petrol',
  price: 800000
},
{
  _id: ObjectId('6911a8e8e3d38bbe28e14762'),
  maker: 'Kia',
  model: 'Sonet',
  fuel_type: 'Petrol',
  price: 1000000
}
```

```
]
car_dealership> db.cars.find({ fuel_type: "Petrol" }).pretty()
|
[
{
  _id: ObjectId('6911a8dfe3d38bbe28e1475f'),
  maker: 'Tata',
  model: 'Nexon',
  fuel_type: 'Petrol',
  price: 900000
},
{
  _id: ObjectId('6911a8e8e3d38bbe28e14761'),
  maker: 'Maruti',
  model: 'Swift',
  fuel_type: 'Petrol',
  price: 800000
},
{
  _id: ObjectId('6911a8e8e3d38bbe28e14762'),
  maker: 'Kia',
  model: 'Sonet',
  fuel_type: 'Petrol',
  price: 1000000
}
]
car_dealership> db.cars.find({}, { model: 1 }).pretty()
|
[
  { _id: ObjectId('6911a8dfe3d38bbe28e1475f'), model: 'Nexon' },
  { _id: ObjectId('6911a8e8e3d38bbe28e14760'), model: 'Creta' },
  { _id: ObjectId('6911a8e8e3d38bbe28e14761'), model: 'Swift' },
  { _id: ObjectId('6911a8e8e3d38bbe28e14762'), model: 'Sonet' }
]
car_dealership> db.cars.find({}, { model: 1, _id: 0 }).pretty()
|
[
  { model: 'Nexon' },
  { model: 'Creta' },
  { model: 'Swift' },
  { model: 'Sonet' }
]
car_dealership> db.cars.updateOne(
| { model: "Nexon" },
| { $set: { price: 950000 } }
| )
|
```

```
{  
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 1,  
  modifiedCount: 1,  
  upsertedCount: 0  
}  
car_dealership> db.cars.updateMany(  
| { fuel_type: "Petrol" },  
| { $inc: { price: 50000 } }  
| )  
|  
{  
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 3,  
  modifiedCount: 3,  
  upsertedCount: 0  
}  
car_dealership> db.cars.updateOne(  
| { model: "Creta" },  
| { $push: { features: "Cruise Control" } }  
| )  
|  
{  
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 1,  
  modifiedCount: 1,  
  upsertedCount: 0  
}  
car_dealership> db.cars.updateOne(  
| { model: "Creta" },  
| { $pull: { features: "Cruise Control" } }  
| )  
|  
{  
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 1,  
  modifiedCount: 1,  
  upsertedCount: 0  
}  
car_dealership> db.cars.deleteOne({ model: "Swift" })  
|  
{ acknowledged: true, deletedCount: 1 }  
car_dealership> db.cars.deleteMany({ fuel_type: "Diesel" })
```

```
|  
| { acknowledged: true, deletedCount: 1 }  
car_dealership> db.cars.deleteMany({})  
|  
| { acknowledged: true, deletedCount: 2 }  
car_dealership> db.cars.drop()  
|  
true  
car_dealership> db.cars.aggregate([  
| { $group: { _id: "$maker", totalCars: { $sum: 1 } } }  
| ])  
|  
  
car_dealership> db.cars.aggregate([  
| { $group: { _id: "$fuel_type", avgPrice: { $avg: "$price" } } }  
| ])  
|  
  
car_dealership> db.createCollection("cars")  
|  
{ ok: 1 }  
car_dealership> db.cars.insertMany([  
| { maker: "Tata", model: "Nexon", fuel_type: "Petrol", price: 900000 },  
| { maker: "Hyundai", model: "Creta", fuel_type: "Diesel", price: 1500000 },  
| { maker: "Maruti", model: "Swift", fuel_type: "Petrol", price: 800000 },  
| { maker: "Kia", model: "Sonet", fuel_type: "Petrol", price: 1000000 },  
| { maker: "Tata", model: "Harrier", fuel_type: "Diesel", price: 1600000 }  
| ])  
|  
{  
  acknowledged: true,  
  insertedIds: {  
    '0': ObjectId('6911aa0ce3d38bbe28e14763'),  
    '1': ObjectId('6911aa0ce3d38bbe28e14764'),  
    '2': ObjectId('6911aa0ce3d38bbe28e14765'),  
    '3': ObjectId('6911aa0ce3d38bbe28e14766'),  
    '4': ObjectId('6911aa0ce3d38bbe28e14767')  
  }  
}  
car_dealership> db.cars.aggregate([  
| { $group: { _id: "$maker", totalCars: { $sum: 1 } } }  
| ])  
|  
[  
  { _id: 'Hyundai', totalCars: 1 },  
  { _id: 'Maruti', totalCars: 1 },  
  { _id: 'Tata', totalCars: 2 },
```

```
{ _id: 'Kia', totalCars: 1 }
]
car_dealership> db.cars.aggregate([
| { $match: { price: { $gt: 900000 } } },
| { $group: { _id: "$maker", avgPrice: { $avg: "$price" }, count: { $sum: 1 } } },
| { $sort: { avgPrice: -1 } }
| ])
|
[
{ _id: 'Tata', avgPrice: 1600000, count: 1 },
{ _id: 'Hyundai', avgPrice: 1500000, count: 1 },
{ _id: 'Kia', avgPrice: 1000000, count: 1 }
]
car_dealership> show dbs
|
admin      40.00 KiB
blogAppDatabase 216.00 KiB
car_dealership 40.00 KiB
config      96.00 KiB
dummyTodo    72.00 KiB
local       176.00 KiB
myDatabase   72.00 KiB
car_dealership>
```