

```
test> use bank_db
```

```
switched to db bank_db
```

```
bank_db> show dbs
```

```
admin 40.00 KiB
```

```
config 84.00 KiB
```

```
local 72.00 KiB
```

```
school 72.00 KiB
```

```
bank_db>
```

```
bank_db> db.createCollection("employees")
```

```
{ ok: 1 }
```

```
bank_db>
```

```
bank_db> show dbs
```

```
admin 40.00 KiB
```

```
bank_db 8.00 KiB
```

```
config 84.00 KiB
```

```
local 72.00 KiB
```

```
school 72.00 KiB
```

```
bank_db>
```

```
bank_db> show collections
```

```
employees
```

```
bank_db> db.createCollection("branches")
```

```
{ ok: 1 }
```

```
bank_db> show collections
```

```
branches
```

```
employees
```

```
bank_db> db.branches.drop()
```

```
true
```

```
bank_db> show collections
```

employees

```
bank_db> db.dropDatabase()
```

```
{ ok: 1, dropped: 'bank_db' }
```

```
bank_db>
```

```
bank_db>
```

```
bank_db>
```

```
bank_db> use car_dealership
```

```
switched to db car_dealership
```

```
car_dealership>
```

```
car_dealership> db.createCollection("cars")
```

```
{ ok: 1 }
```

```
car_dealership> show collections
```

```
cars
```

```
car_dealership> db.cars.insertOne(
```

```
... {
```

```
...   "maker": "Tata",
```

```
...   "model": "Nexon",
```

```
...   "fuel_type": "Petrol",
```

```
...   "transmission": "Automatic",
```

```
...   "engine": {
```

```
...     "type": "Turbocharged",
```

```
...     "cc": 1199,
```

```
...     "torque": "170 Nm"
```

```
...   },
```

```
...   "features": [
```

```
...     "Touchscreen",
```

```
...     "Reverse Camera",
```

```

... "Bluetooth Connectivity"
... ],
... "sunroof": false,
... "airbags": 2
... }
... )
{
  acknowledged: true,
  insertedId: ObjectId('68330cdb55c924ce206c4bd0')
}
car_dealership> db.cars.insertMany(
... [
... {
... "maker": "Hyundai",
... "model": "Creta",
... "fuel_type": "Diesel",
... "transmission": "Manual",
... "engine": {
... "type": "Naturally Aspirated",
... "cc": 1493,
... "torque": "250 Nm"
... },
... "features": [
... "Sunroof",
... "Leather Seats",
... "Wireless Charging",
... "Ventilated Seats",
... "Bluetooth"
... ],
... "sunroof": true,
... "airbags": 6

```

```
... },
... {
... "maker": "Maruti Suzuki",
... "model": "Baleno",
... "fuel_type": "Petrol",
... "transmission": "Automatic",
... "engine": {
... "type": "Naturally Aspirated",
... "cc": 1197,
... "torque": "113 Nm"
... },
... "features": [
... "Projector Headlamps",
... "Apple CarPlay",
... "ABS"
... ],
... "sunroof": false,
... "airbags": 2
... },
... {
... "maker": "Mahindra",
... "model": "XUV500",
... "fuel_type": "Diesel",
... "transmission": "Manual",
... "engine": {
... "type": "Turbocharged",
... "cc": 2179,
... "torque": "360 Nm"
... },
... "features": [
... "All-Wheel Drive",
```

```
... "Navigation System",
... "Cruise Control"
... ],
... "sunroof": true,
... "airbags": 6
... },
... {
... "maker": "Honda",
... "model": "City",
... "fuel_type": "Petrol",
... "transmission": "Automatic",
... "engine": {
... "type": "Naturally Aspirated",
... "cc": 1498,
... "torque": "145 Nm"
... },
... "features": [
... "Keyless Entry",
... "Auto AC",
... "Multi-angle Rearview Camera"
... ],
... "sunroof": false,
... "airbags": 4
... }
... ]
... )
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('68330d5855c924ce206c4bd1'),
    '1': ObjectId('68330d5855c924ce206c4bd2'),
```

```
'2': ObjectId('68330d5855c924ce206c4bd3'),
'3': ObjectId('68330d5855c924ce206c4bd4')
}
}
car_dealership> db.cars.find()
[
  {
    _id: ObjectId('68330cdb55c924ce206c4bd0'),
    maker: 'Tata',
    model: 'Nexon',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
    features: [ 'Touchscreen', 'Reverse Camera', 'Bluetooth Connectivity' ],
    sunroof: false,
    airbags: 2
  },
  {
    _id: ObjectId('68330d5855c924ce206c4bd1'),
    maker: 'Hyundai',
    model: 'Creta',
    fuel_type: 'Diesel',
    transmission: 'Manual',
    engine: { type: 'Naturally Aspirated', cc: 1493, torque: '250 Nm' },
    features: [
      'Sunroof',
      'Leather Seats',
      'Wireless Charging',
      'Ventilated Seats',
      'Bluetooth'
    ],
  },
]
```

```
sunroof: true,
airbags: 6
},
{
  _id: ObjectId('68330d5855c924ce206c4bd2'),
  maker: 'Maruti Suzuki',
  model: 'Baleno',
  fuel_type: 'Petrol',
  transmission: 'Automatic',
  engine: { type: 'Naturally Aspirated', cc: 1197, torque: '113 Nm' },
  features: [ 'Projector Headlamps', 'Apple CarPlay', 'ABS' ],
  sunroof: false,
  airbags: 2
},
{
  _id: ObjectId('68330d5855c924ce206c4bd3'),
  maker: 'Mahindra',
  model: 'XUV500',
  fuel_type: 'Diesel',
  transmission: 'Manual',
  engine: { type: 'Turbocharged', cc: 2179, torque: '360 Nm' },
  features: [ 'All-Wheel Drive', 'Navigation System', 'Cruise Control' ],
  sunroof: true,
  airbags: 6
},
{
  _id: ObjectId('68330d5855c924ce206c4bd4'),
  maker: 'Honda',
  model: 'City',
  fuel_type: 'Petrol',
  transmission: 'Automatic',
```

```
    engine: { type: 'Naturally Aspirated', cc: 1498, torque: '145 Nm' },
    features: [ 'Keyless Entry', 'Auto AC', 'Multi-angle Rearview Camera' ],
    sunroof: false,
    airbags: 4
  }
]
```

```
car_dealership> db.cars.findOne()
```

```
ReferenceError: findOne is not defined
```

```
car_dealership> db.cas.findOne()
```

```
null
```

```
car_dealership> db.cars.findOne()
```

```
{
  _id: ObjectId('68330cdb55c924ce206c4bd0'),
  maker: 'Tata',
  model: 'Nexon',
  fuel_type: 'Petrol',
  transmission: 'Automatic',
  engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
  features: [ 'Touchscreen', 'Reverse Camera', 'Bluetooth Connectivity' ],
  sunroof: false,
  airbags: 2
}
```

```
car_dealership> db.cars.find({model:1})
```

```
car_dealership> db.cars.find({}, {model:1})
```

```
[
  { _id: ObjectId('68330cdb55c924ce206c4bd0'), model: 'Nexon' },
  { _id: ObjectId('68330d5855c924ce206c4bd1'), model: 'Creta' },
  { _id: ObjectId('68330d5855c924ce206c4bd2'), model: 'Baleno' },
  { _id: ObjectId('68330d5855c924ce206c4bd3'), model: 'XUV500' },
  { _id: ObjectId('68330d5855c924ce206c4bd4'), model: 'City' }
```



```
]
```

```
car_dealership> db.cars.find({}, {model:1, _id:0})
```

```
[
```

```
{ model: 'Nexon' },
```

```
{ model: 'Creta' },
```

```
{ model: 'Baleno' },
```

```
{ model: 'XUV500' },
```

```
{ model: 'City' }
```

```
]
```

```
car_dealership> db.cars.find({fuel_type:"Petrol"})
```

```
[
```

```
{
```

```
  _id: ObjectId('68330cdb55c924ce206c4bd0'),
```

```
  maker: 'Tata',
```

```
  model: 'Nexon',
```

```
  fuel_type: 'Petrol',
```

```
  transmission: 'Automatic',
```

```
  engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
```

```
  features: [ 'Touchscreen', 'Reverse Camera', 'Bluetooth Connectivity' ],
```

```
  sunroof: false,
```

```
  airbags: 2
```

```
},
```

```
{
```

```
  _id: ObjectId('68330d5855c924ce206c4bd2'),
```

```
  maker: 'Maruti Suzuki',
```

```
  model: 'Baleno',
```

```
  fuel_type: 'Petrol',
```

```
  transmission: 'Automatic',
```

```
  engine: { type: 'Naturally Aspirated', cc: 1197, torque: '113 Nm' },
```

```
  features: [ 'Projector Headlamps', 'Apple CarPlay', 'ABS' ],
```

```
  sunroof: false,
```

```
    airbags: 2
  },
  {
    _id: ObjectId('68330d5855c924ce206c4bd4'),
    maker: 'Honda',
    model: 'City',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Naturally Aspirated', cc: 1498, torque: '145 Nm' },
    features: [ 'Keyless Entry', 'Auto AC', 'Multi-angle Rearview Camera' ],
    sunroof: false,
    airbags: 4
  }
]
```

```
car_dealership> db.cars.find({features:"Sunroof"})
```

```
[
  {
    _id: ObjectId('68330d5855c924ce206c4bd1'),
    maker: 'Hyundai',
    model: 'Creta',
    fuel_type: 'Diesel',
    transmission: 'Manual',
    engine: { type: 'Naturally Aspirated', cc: 1493, torque: '250 Nm' },
    features: [
      'Sunroof',
      'Leather Seats',
      'Wireless Charging',
      'Ventilated Seats',
      'Bluetooth'
    ],
    sunroof: true,
  }
]
```

```
    airbags: 6
  }
]
```

```
car_dealership> db.cars.find({engine.type:"Turbocharged"})
```

Uncaught:

SyntaxError: Unexpected token, expected "," (1:20)

```
> 1 | db.cars.find({engine.type:"Turbocharged"})
```

```
    |           ^
```

```
2 |
```

```
car_dealership> db.cars.find({"engine.type":"Turbocharged"})
```

```
[
  {
    _id: ObjectId('68330cdb55c924ce206c4bd0'),
    maker: 'Tata',
    model: 'Nexon',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
    features: [ 'Touchscreen', 'Reverse Camera', 'Bluetooth Connectivity' ],
    sunroof: false,
    airbags: 2
  },
  {
    _id: ObjectId('68330d5855c924ce206c4bd3'),
    maker: 'Mahindra',
    model: 'XUV500',
    fuel_type: 'Diesel',
    transmission: 'Manual',
    engine: { type: 'Turbocharged', cc: 2179, torque: '360 Nm' },
```

```

    features: [ 'All-Wheel Drive', 'Navigation System', 'Cruise Control' ],
    sunroof: true,
    airbags: 6
  }
]
car_dealership> db.cars.updateOne(
... {model:"Nexon"},
... {$set:{color:"Red"}}
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
car_dealership> db.cars.find({model:"Nexon"})
[
  {
    _id: ObjectId('68330cdb55c924ce206c4bd0'),
    maker: 'Tata',
    model: 'Nexon',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
    features: [ 'Touchscreen', 'Reverse Camera', 'Bluetooth Connectivity' ],
    sunroof: false,
    airbags: 2,
    color: 'Red'
  }
]

```

```
car_dealership> db.cars.updateOne(
... {model:"Nexon"},
... {$push:{features:"Heated Seats"}}
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
car_dealership> db.cars.find({model:"Nexon"})
[
  {
    _id: ObjectId('68330cdb55c924ce206c4bd0'),
    maker: 'Tata',
    model: 'Nexon',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
    features: [
      'Touchscreen',
      'Reverse Camera',
      'Bluetooth Connectivity',
      'Heated Seats'
    ],
    sunroof: false,
    airbags: 2,
    color: 'Red'
  }
]
```

```
car_dealership> db.cars.updateOne(
... .. {model:"Nexon"},
... .. {$push:{features:"Heated Seats"}}
... .
...
... )
```

Uncaught:

SyntaxError: Unexpected token (6:0)

```
4 | .
5 |
> 6 | )
   | ^
7 |
```

```
car_dealership> db.cars.updateOne(
... {fuel_type:"Diesel"},
... {$set:{alloys:"yes"}}
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

```
car_dealership> db.cars.updateMany(
... {fuel_type:"Diesel"},
... {$set:{alloys:"yes"}}
... )
{
```

```
    acknowledged: true,  
    insertedId: null,  
    matchedCount: 2,  
    modifiedCount: 1,  
    upsertedCount: 0  
  }
```

```
car_dealership> db.cars.updateOne(  
... {model:"Creta"},  
... {$set:{"engine.torque":"270 nm"}}  
... )  
{
```

```
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 1,  
  modifiedCount: 1,  
  upsertedCount: 0
```

```
}
```

```
car_dealership> db.cars.updateOne(  
... {model:"Nexon"},  
... {$push:{features:{$each:["wireless charging","voice control"]}}}  
... )  
{
```

```
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 1,  
  modifiedCount: 1,  
  upsertedCount: 0
```

```
}
```

```
car_dealership> db.cars.updateOne(  
... {model:"Nexon"},
```

```

... {$unset:{color: ""}}
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
car_dealership> db.cars.updateMany({}, {$set:{color: "Blue"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
car_dealership> db.cars.find()
[
  {
    _id: ObjectId('68330cdb55c924ce206c4bd0'),
    maker: 'Tata',
    model: 'Nexon',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Turbocharged', cc: 1199, torque: '170 Nm' },
    features: [
      'Touchscreen',
      'Reverse Camera',
      'Bluetooth Connectivity',
      'Heated Seats',

```



```
    'wireless charging',
    'voice control'
  ],
  sunroof: false,
  airbags: 2,
  color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd1'),
  maker: 'Hyundai',
  model: 'Creta',
  fuel_type: 'Diesel',
  transmission: 'Manual',
  engine: { type: 'Naturally Aspirated', cc: 1493, torque: '270 nm' },
  features: [
    'Sunroof',
    'Leather Seats',
    'Wireless Charging',
    'Ventilated Seats',
    'Bluetooth'
  ],
  sunroof: true,
  airbags: 6,
  alloys: 'yes',
  color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd2'),
  maker: 'Maruti Suzuki',
  model: 'Baleno',
  fuel_type: 'Petrol',
```

```
transmission: 'Automatic',
engine: { type: 'Naturally Aspirated', cc: 1197, torque: '113 Nm' },
features: [ 'Projector Headlamps', 'Apple CarPlay', 'ABS' ],
sunroof: false,
airbags: 2,
color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd3'),
  maker: 'Mahindra',
  model: 'XUV500',
  fuel_type: 'Diesel',
  transmission: 'Manual',
  engine: { type: 'Turbocharged', cc: 2179, torque: '360 Nm' },
  features: [ 'All-Wheel Drive', 'Navigation System', 'Cruise Control' ],
  sunroof: true,
  airbags: 6,
  alloys: 'yes',
  color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd4'),
  maker: 'Honda',
  model: 'City',
  fuel_type: 'Petrol',
  transmission: 'Automatic',
  engine: { type: 'Naturally Aspirated', cc: 1498, torque: '145 Nm' },
  features: [ 'Keyless Entry', 'Auto AC', 'Multi-angle Rearview Camera' ],
  sunroof: false,
  airbags: 4,
  color: 'Blue'
}
```

```
}  
]
```

```
car_dealership> db.cars.updateMany(  
... {model:"Venue"},  
... {$set:{Maker:"Hyundai"}},  
... {upsert:true}  
... )  
{  
  acknowledged: true,  
  insertedId: ObjectId('683318b12de62c4f8acc9840'),  
  matchedCount: 0,  
  modifiedCount: 0,  
  upsertedCount: 1  
}
```

```
car_dealership> db.cars.deleteOne({fuel_type:"Petrol"})  
{ acknowledged: true, deletedCount: 1 }  
car_dealership> db.cars.find()  
[  
  {  
    _id: ObjectId('68330d5855c924ce206c4bd1'),  
    maker: 'Hyundai',  
    model: 'Creta',  
    fuel_type: 'Diesel',  
    transmission: 'Manual',  
    engine: { type: 'Naturally Aspirated', cc: 1493, torque: '270 nm' },  
    features: [  
      'Sunroof',  
      'Leather Seats',  
      'Wireless Charging',
```

```
    'Ventilated Seats',
    'Bluetooth'
  ],
  sunroof: true,
  airbags: 6,
  alloys: 'yes',
  color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd2'),
  maker: 'Maruti Suzuki',
  model: 'Baleno',
  fuel_type: 'Petrol',
  transmission: 'Automatic',
  engine: { type: 'Naturally Aspirated', cc: 1197, torque: '113 Nm' },
  features: [ 'Projector Headlamps', 'Apple CarPlay', 'ABS' ],
  sunroof: false,
  airbags: 2,
  color: 'Blue'
},
{
  _id: ObjectId('68330d5855c924ce206c4bd3'),
  maker: 'Mahindra',
  model: 'XUV500',
  fuel_type: 'Diesel',
  transmission: 'Manual',
  engine: { type: 'Turbocharged', cc: 2179, torque: '360 Nm' },
  features: [ 'All-Wheel Drive', 'Navigation System', 'Cruise Control' ],
  sunroof: true,
  airbags: 6,
  alloys: 'yes',
```

```
    color: 'Blue'
  },
  {
    _id: ObjectId('68330d5855c924ce206c4bd4'),
    maker: 'Honda',
    model: 'City',
    fuel_type: 'Petrol',
    transmission: 'Automatic',
    engine: { type: 'Naturally Aspirated', cc: 1498, torque: '145 Nm' },
    features: [ 'Keyless Entry', 'Auto AC', 'Multi-angle Rearview Camera' ],
    sunroof: false,
    airbags: 4,
    color: 'Blue'
  },
  {
    _id: ObjectId('683318b12de62c4f8acc9840'),
    model: 'Venue',
    Maker: 'Hyundai'
  }
]

car_dealership> db.cars.deleteMany({fuel_type:"Petrol"})
{ acknowledged: true, deletedCount: 2 }
```