

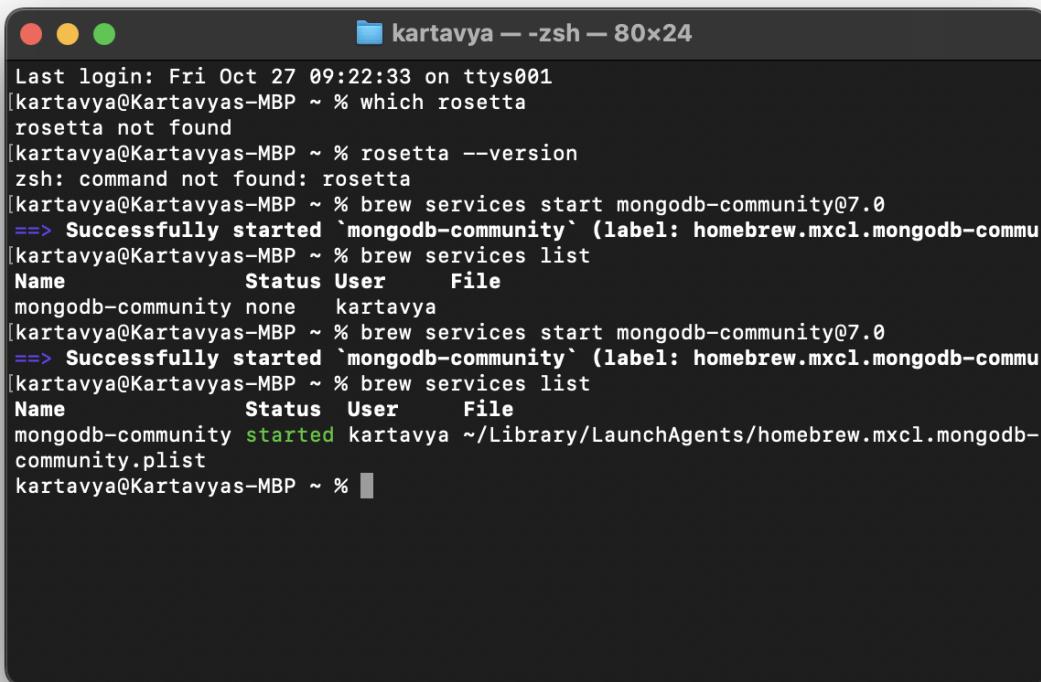
Name : **Kartavya Mandani**

Roll No.: **20BCE120**

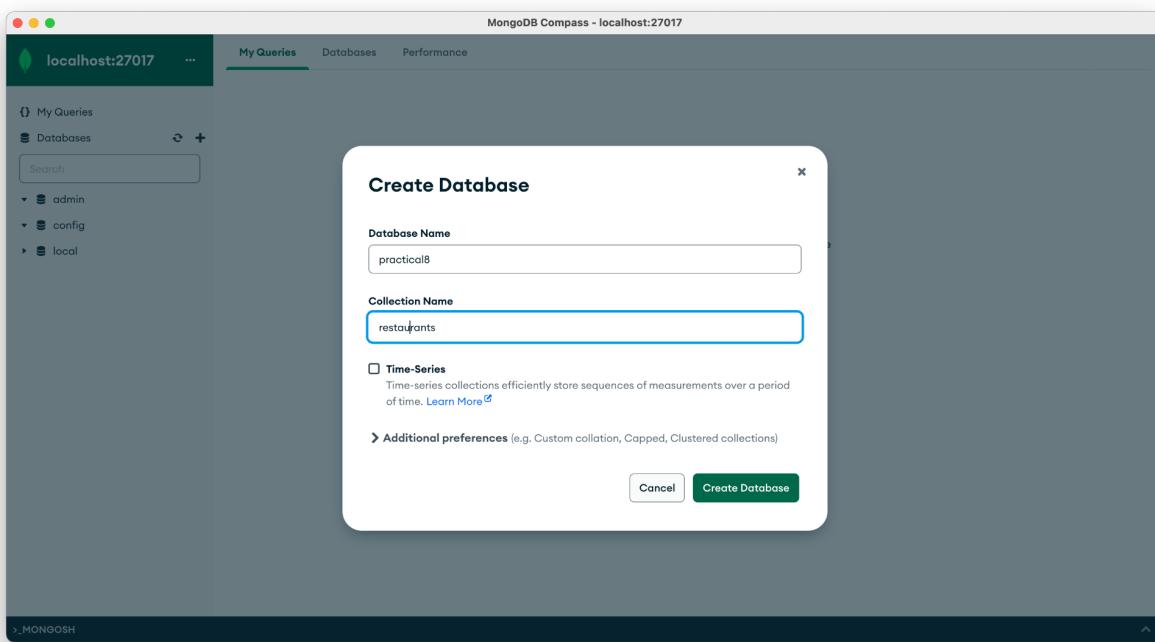
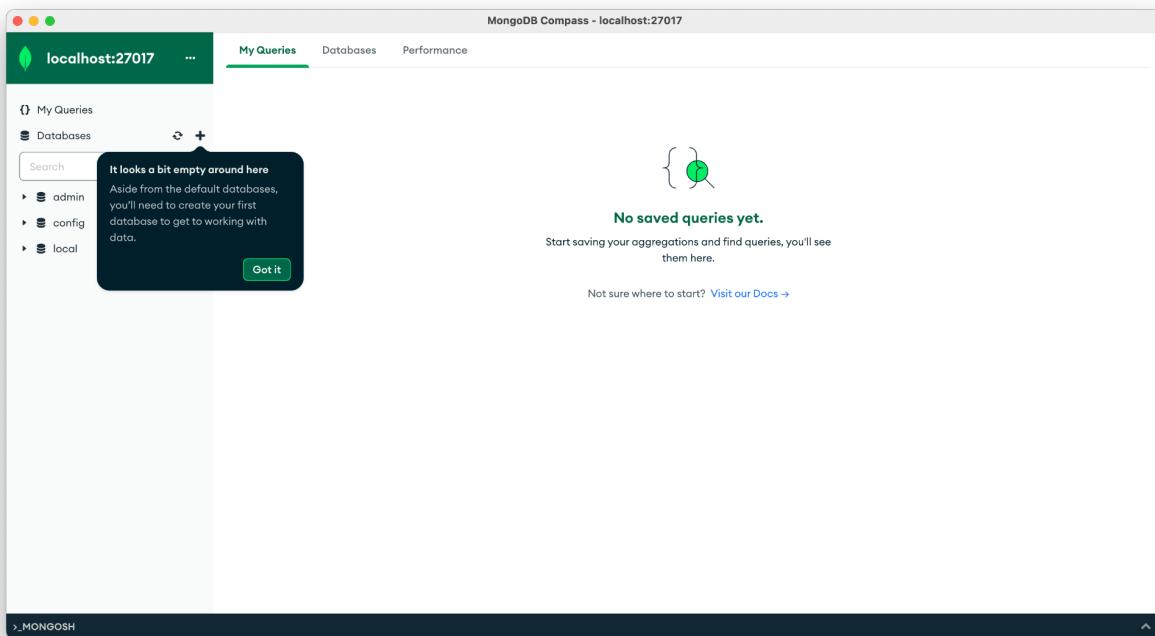
Course: **2CS702 Big Data Analytics**

Practical No.: **8 (MongoDB Installation and CRUD operations)**

Installation and Starting Server:



```
Last login: Fri Oct 27 09:22:33 on ttys001
[kartavya@Kartavyas-MBP ~ % which rosetta
rosetta not found
[kartavya@Kartavyas-MBP ~ % rosetta --version
zsh: command not found: rosetta
[kartavya@Kartavyas-MBP ~ % brew services start mongodb-community@7.0
==> Successfully started `mongodb-community` (label: homebrew.mxcl.mongodb-commu
[kartavya@Kartavyas-MBP ~ % brew services list
Name          Status User      File
mongodb-community none kartavya
[kartavya@Kartavyas-MBP ~ % brew services start mongodb-community@7.0
==> Successfully started `mongodb-community` (label: homebrew.mxcl.mongodb-commu
[kartavya@Kartavyas-MBP ~ % brew services list
Name          Status User      File
mongodb-community started kartavya ~/Library/LaunchAgents/homebrew.mxcl.mongodb-
community.plist
kartavya@Kartavyas-MBP ~ % ]
```



MongoDB Compass - localhost:27017/practical8.restaurants

localhost:27017 ...

Documents practical8.restau... +

My Queries

Databases

Search

admin config local practical8 restaurants ...

practical8.restaurants

0 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

0 - 0 of 0

This collection has no data

It only takes a few seconds to import data from a JSON or CSV file.

Import Data

_MONGOSH

The screenshot shows the MongoDB Compass interface connected to the 'localhost:27017' database. The main title bar reads 'MongoDB Compass - localhost:27017/practical8.restaurants'. On the left sidebar, under 'Databases', the 'practical8' database is selected, and within it, the 'restaurants' collection is highlighted. The main content area displays three documents from the 'restaurants' collection:

- `_id: ObjectId('653bbbf8eaec2178ba8b4a30b')`
address: Object
borough: "Bronx"
cuisine: "Bakery"
grades: Array (5)
name: "Morris Park Bake Shop"
restaurant_id: "30075445"
- `_id: ObjectId('653bbbf8eaec2178ba8b4a30c')`
address: Object
borough: "Brooklyn"
cuisine: "Hamburgers"
grades: Array (4)
name: "Wendy's"
restaurant_id: "30112340"
- `_id: ObjectId('653bbbf8eaec2178ba8b4a30d')`
address: Object
borough: "Manhattan"
cuisine: "Irish"
grades: Array (4)

At the bottom left, a message indicates 'Import completed. 25359 documents imported.' The top right corner shows statistics: 25.4k DOCUMENTS and 1 INDEXES.

MongoDB Compass - localhost:27017/practical8.restaurants

localhost:27017 ... Documents practical8.restau... +

My Queries Databases practical8.restaurants

Search

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or [Generate query](#) Explain Reset Find Options

ADD DATA EXPORT DATA

25.4k 1 DOCUMENTS INDEXES

_MONGOSH

```
> db.restaurants.find().count()
< 0
> db.practical8.restaurants.find().count()
< 0
> use practical8
< switched to db practical8
> db.restaurants.find().count()
< 25359
practical8>
```

Create:

MongoDB Compass - localhost:27017/practical8.restaurants

localhost:27017 ... Documents practical8.restau... +

My Queries Databases practical8.restaurants

_MONGOSH

```
practical8> db.restaurants.insertOne(
  {
    "address": {
      "building": "1",
      "coord": [
        0,
        0
      ],
      "street": "Mahatama Gandhi",
      "zipcode": "382481"
    },
    "borough": "Ahmedabad",
    "cuisine": "Fast Food",
    "grades": [
      {
        "date": {
          "$date": "2023-03-03T00:00:00.000Z"
        },
        "grade": "A",
        "score": 5
      },
      {
        "date": {
          "$date": "2023-09-11T00:00:00.000Z"
        },
        "grade": "B"
      }
    ]
  }
)
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

{ My Queries
> MONGOSH
{
  "grades": [
    {
      "date": {
        "$date": "2013-01-24T00:00:00.000Z"
      },
      "grade": "A",
      "score": 10
    },
    {
      "date": {
        "$date": "2011-11-23T00:00:00.000Z"
      },
      "grade": "A",
      "score": 9
    },
    {
      "date": {
        "$date": "2011-03-10T00:00:00.000Z"
      },
      "grade": "B",
      "score": 14
    }
  ],
  "name": "Ghughra Wala",
  "restaurant_id": "00001"
}
})
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

{ My Queries
> MONGOSH
> db.restaurants.find(
  { "name": "Ghughra Wala"
  }
)
< [
  {
    _id: ObjectId("653bc29c57c071f644d445a9"),
    address: {
      building: '1',
      coord: [
        0,
        0
      ],
      street: 'Mahatama Gandhi',
      zipcode: '382481'
    },
    borough: 'Ahmedabad',
    cuisine: 'Fast Food',
    grades: [
      {
        date: 2023-03-03T00:00:00.000Z,
        grade: 'A',
        score: 5
      },
      {
        date: 2023-09-11T00:00:00.000Z,
        grade: 'A'
      }
    ]
  }
]
```

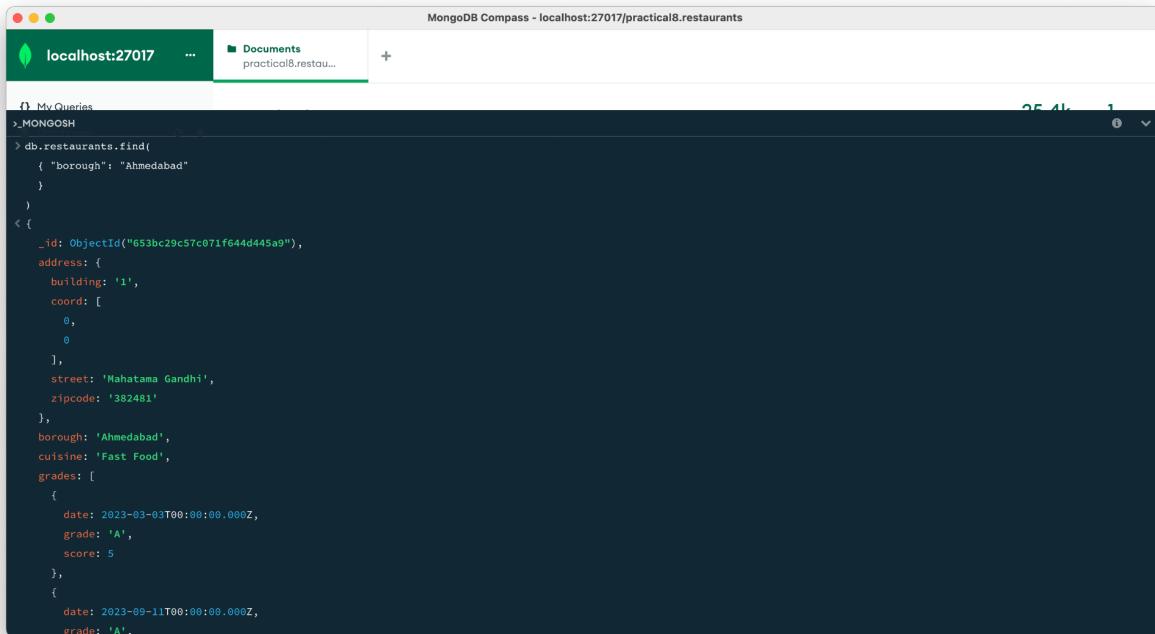
```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

My Queries MONGOSH practical8>
db.restaurants.insertMany(
{
  "address": {
    "building": "2",
    "coord": [
      1,
      1
    ],
    "street": "Narendra Modi",
    "zipcode": "382481"
  },
  "borough": "Ahmedabad",
  "cuisine": "Pizza",
  "grades": [
    {
      "date": {
        "$date": "2023-03-03T00:00:00.000Z"
      },
      "grade": "A",
      "score": 5
    },
    {
      "date": {
        "$date": "2023-09-11T00:00:00.000Z"
      }
    }
  ]
}
)
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

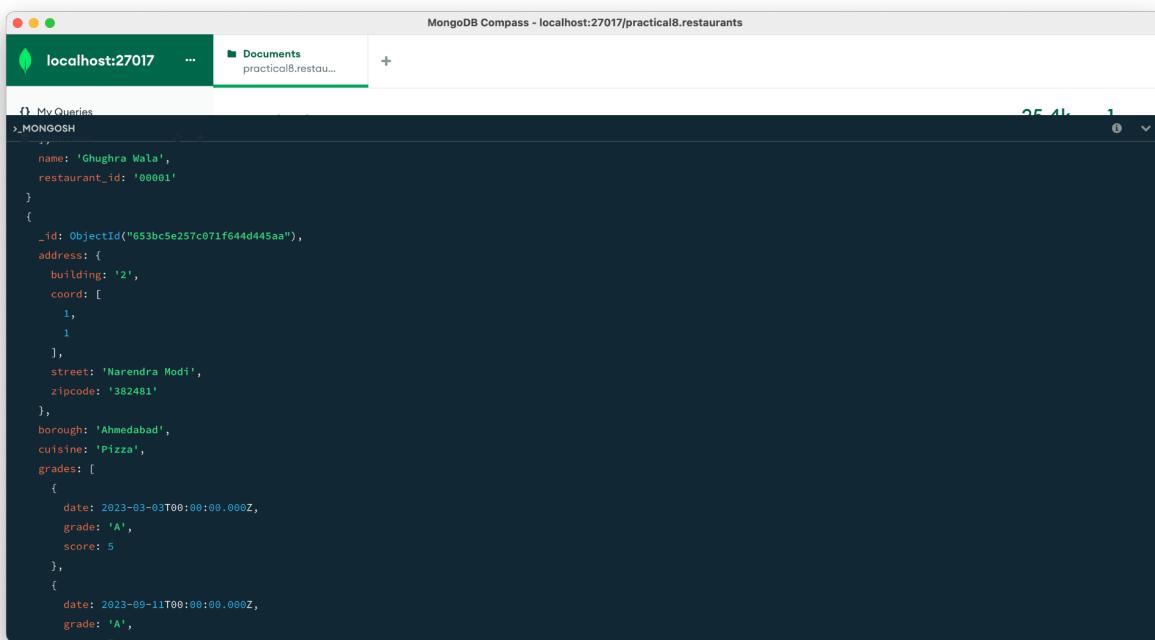
My Queries MONGOSH practical8>
db.restaurants.insertMany(
{
  "address": {
    "building": "2",
    "coord": [
      1,
      1
    ],
    "street": "Narendra Modi",
    "zipcode": "382481"
  },
  "borough": "Ahmedabad",
  "cuisine": "Pizza",
  "grades": [
    {
      "date": {
        "$date": "2023-03-03T00:00:00.000Z"
      },
      "grade": "A",
      "score": 5
    },
    {
      "date": {
        "$date": "2023-09-11T00:00:00.000Z"
      }
    }
  ]
}
)
```

Read:



MongoDB Compass - localhost:27017/practical8.restaurants

```
{}, My Queries
> .MONGOSH
> db.restaurants.find(
  { "borough": "Ahmedabad"
  }
)
{
  "_id": ObjectId("653bc29c57c071f644d445a9"),
  "address": {
    "building": "1",
    "coord": [
      0,
      0
    ],
    "street": "Mahatama Gandhi",
    "zipcode": "382481"
  },
  "borough": "Ahmedabad",
  "cuisine": "Fast Food",
  "grades": [
    {
      "date": 2023-03-03T00:00:00.000Z,
      "grade": "A",
      "score": 5
    },
    {
      "date": 2023-09-11T00:00:00.000Z,
      "grade": "A",
      "score": 5
    }
  ]
}
```



MongoDB Compass - localhost:27017/practical8.restaurants

```
{}, My Queries
> .MONGOSH
> 
{
  "name": "Ghughra Wala",
  "restaurant_id": "00001"
}
{
  "_id": ObjectId("653bc5e257c071f644d445aa"),
  "address": {
    "building": "2",
    "coord": [
      1,
      1
    ],
    "street": "Narendra Modi",
    "zipcode": "382481"
  },
  "borough": "Ahmedabad",
  "cuisine": "Pizza",
  "grades": [
    {
      "date": 2023-03-03T00:00:00.000Z,
      "grade": "A",
      "score": 5
    },
    {
      "date": 2023-09-11T00:00:00.000Z,
      "grade": "A",
      "score": 5
    }
  ]
}
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

My Queries
> MONGOSH
{
  "date": "2011-03-10T00:00:00.000Z",
  "grade": "B",
  "score": 14
}
],
],
{
  "name": "La Pinoy",
  "restaurant_id": "00002"
}
{
  "_id": ObjectId("653bc61b57c071f644d445ab"),
  "address": {
    "building": "3",
    "coord": [
      2,
      2
    ],
    "street": "Sardar Patel",
    "zipcode": "382481"
  },
  "borough": "Ahmedabad",
  "cuisine": "Thepla",
  "grades": [
    {
      "date": "2023-03-03T00:00:00.000Z",
      "grade": "A",
      "score": 9
    }
  ]
}
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau...
+ 25.4k 1

My Queries
> MONGOSH
{
  "date": "2023-09-11T00:00:00.000Z",
  "grade": "A",
  "score": 7
},
{
  "date": "2013-01-24T00:00:00.000Z",
  "grade": "A",
  "score": 10
},
{
  "date": "2011-11-23T00:00:00.000Z",
  "grade": "A",
  "score": 9
},
{
  "date": "2011-03-10T00:00:00.000Z",
  "grade": "B",
  "score": 14
}
],
{
  "name": "Gatta Bhai",
  "restaurant_id": "00003"
}
practical8>
```

Update:

```
localhost:27017 ... MongoDB Compass - localhost:27017/practical8.restaurants
Documents practical8.restau... + 25.4k 1

My Queries
>_MONGOSH
> db.restaurants.updateOne(
  {"name": "La Pinoz"},
  {"$set: {borough: "Gandhinagar"})
)
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
> db.restaurants.findOne(
  {"name": "La Pinoz"}
)
< {
  _id: ObjectId("653bc5e257c071f644d445aa"),
  address: {
    building: '2',
    coord: [
      1,
      1
    ],
    street: 'Narendra Modi',
    zipcode: '382481'
  },
  borough: 'Gandhinagar',
  cuisine: 'Italian',
  grades: [
    {
      date: 2023-03-03T00:00:00.000Z,
      grade: 'A',
      score: 5
    }
  ],
  name: 'La Pinoz',
  price: '$$',
  rating: 4.5
}
```

```
localhost:27017 ... MongoDB Compass - localhost:27017/practical8.restaurants
Documents practical8.restau... + 25.4k 1

My Queries
>_MONGOSH
> db.restaurants.updateOne(
  {"name": "La Pinoz"},
  {"$set: {borough: "Gandhinagar")
)
{
  modifiedCount: 1,
  upsertedCount: 0
}
> db.restaurants.findOne(
  {"name": "La Pinoz"}
)
< {
  _id: ObjectId("653bc5e257c071f644d445aa"),
  address: {
    building: '2',
    coord: [
      1,
      1
    ],
    street: 'Narendra Modi',
    zipcode: '382481'
  },
  borough: 'Gandhinagar',
  cuisine: 'Italian',
  grades: [
    {
      date: 2023-03-03T00:00:00.000Z,
      grade: 'A',
      score: 5
    }
  ],
  name: 'La Pinoz',
  price: '$$',
  rating: 4.5
}
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau... + 25.4k 1

{ My Queries
> MONGOSH
{
    {
        date: 2023-09-11T00:00:00.000Z,
        grade: 'A',
        score: 7
    },
    {
        date: 2013-01-24T00:00:00.000Z,
        grade: 'A',
        score: 10
    },
    {
        date: 2011-11-23T00:00:00.000Z,
        grade: 'A',
        score: 9
    },
    {
        date: 2011-03-10T00:00:00.000Z,
        grade: 'B',
        score: 14
    }
},
name: 'La Pinoz',
restaurant_id: '00002',
zipcode: '395007'
}
practical8>
```

```
MongoDB Compass - localhost:27017/practical8.restaurants
localhost:27017 ... Documents practical8.restau... + 25.4k 1

{ My Queries
> MONGOSH
{
    {
        date: 2011-03-10T00:00:00.000Z,
        grade: 'B',
        score: 14
    }
},
name: 'Gatta Bhai',
restaurant_id: '00003'
}
> db.restaurants.updateOne(
    {"name": "La Pinoz"},
    {$set: {zipcode: "395007"}}
)
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
}
> db.restaurants.findOne(
    {"name": "La Pinoz"}
)
< {
    _id: ObjectId("653bc5e257c071f644d445aa"),
    address: {
        building: '2',
```

Delete:

```
localhost:27017 ... MongoDB Compass - localhost:27017/practical8.restaurants
Documents practical8.restau... + 25.4k 1

{} My Queries
>_MONGOSH
{
  {
    date: 2013-01-24T00:00:00.000Z,
    grade: 'A',
    score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'A',
    score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B',
    score: 14
  }
],
name: 'La Pinoz',
restaurant_id: '00002',
zipcode: '395007'
}
> db.restaurants.deleteOne({"name": "La Pinoz"})
< {
  acknowledged: true,
  deletedCount: 1
}
practical8>
```

```
localhost:27017 ... MongoDB Compass - localhost:27017/practical8.restaurants
Documents practical8.restau... + 25.4k 1

{} My Queries
>_MONGOSH
{
  {
    grade: 'A',
    score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'B',
    score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B',
    score: 14
  }
],
name: 'La Pinoz',
restaurant_id: '00002',
zipcode: '395007'
}
> db.restaurants.deleteOne({"name": "La Pinoz"})
< {
  acknowledged: true,
  deletedCount: 1
}
> db.restaurants.findOne({"name": "La Pinoz"})
< null
practical8>
```

```
Last login: Fri Oct 27 09:22:33 on ttys001
[kartavya@Kartavyas-MBP ~ % which rosetta
rosetta not found
[kartavya@Kartavyas-MBP ~ % rosetta --version
zsh: command not found: rosetta
[kartavya@Kartavyas-MBP ~ % brew services start mongodb-community@7.0
==> Successfully started `mongodb-community` (label: homebrew.mxcl.mongodb-commu
[kartavya@Kartavyas-MBP ~ % brew services list
  Name      Status  User      File
mongodb-community none   kartavya
[kartavya@Kartavyas-MBP ~ % brew services start mongodb-community@7.0
==> Successfully started `mongodb-community` (label: homebrew.mxcl.mongodb-commu
[kartavya@Kartavyas-MBP ~ % brew services list
  Name      Status  User      File
mongodb-community started  kartavya ~/Library/LaunchAgents/homebrew.mxcl.mongodb-
community.plist
[kartavya@Kartavyas-MBP ~ % brew services stop mongodb-community@7.0
Stopping `mongodb-community`... (might take a while)
==> Successfully stopped `mongodb-community` (label: homebrew.mxcl.mongodb-commu
kartavya@Kartavyas-MBP ~ %
```

THE END

:)