

Create a collection called restaurants:

The screenshot displays the MongoDB Compass application window. The title bar reads "MongoDB Compass - cluster0.qdmbx.mongodb.net/HW1". The interface is divided into several sections:

- Left Sidebar (Local):** Shows database and collection information. It indicates 6 DBS and 19 COLLECTIONS. A "FAVORITE" button is visible. Below, it lists HOSTS (cluster0-shard-00-01.qdm..., cluster0-shard-00-02.qdm..., cluster0-shard-00-00.qdm...), CLUSTER (Replica Set (atlas-9ori8g-s..., 3 Nodes), and EDITION (MongoDB 4.4.10 Enterprise).
- Top Panel (Collections):** Features a "CREATE COLLECTION" button. Below it is a table with the following columns: Collection Name, Documents, Avg. Document Size, Total Document Size, Num. Indexes, Total Index Size, and Properties. The table contains one entry: "Test" with 0 documents, an average document size of "-", a total document size of "0.0 B", 1 index, and a total index size of "4.1 KB".
- Bottom Panel (Terminal):** Labeled "> _MONGOSH", it shows the execution of the command `db.createCollection("restaurants")`. The output is `< { ok: 1 }`, indicating success. The prompt below the output is "Atlas atlas-9ori8g-shard-0 [primary] HW1>".

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 89°F, the date and time as 1:16 PM on 11/22/2021, and the language set to ENG.

insert one restaurant into the restaurants collection:

The screenshot displays the MongoDB Compass application window. The left sidebar shows the 'Local' connection profile with 6 databases and 19 collections. The main panel shows the 'Collections' tab with a table listing the 'restaurants' collection, which currently has 0 documents, an average document size of 0.0 B, and a total index size of 4.1 KB. Below the table, the mongosh terminal shows the execution of the `db.restaurants.insertOne` command, which successfully inserted a document with the name 'Albaik' and a score of 10. The terminal output includes the `acknowledged` status and the `insertedId`.

Collection Name	Documents	Avg. Document Size	Total Document Size	Num. Indexes	Total Index Size	Properties
restaurants	0	-	0.0 B	1	4.1 KB	

```
>_MONGOSH
> db.restaurants.insertOne({ "name": "Albaik", "city": "Jeddah", "score": 10 })
< { acknowledged: true,
  insertedId: ObjectId("619b6ef8b4f3972feacc8497") }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

insert many restaurants into the restaurants collection:

The screenshot shows the MongoDB Compass interface. On the left, the 'Local' sidebar displays the database structure: 6 DBS, 19 COLLECTIONS, and a list of hosts and clusters. The main panel shows the 'HW1.restaurants' collection with 1 document, a total size of 67B, and 1 index. Below this, the 'Documents' tab is active, showing a filter bar and a table of documents. The bottom panel shows the MongoDB shell output of an insertMany operation, which was successful, returning the inserted IDs for five documents.

MongoDB Compass - cluster0.qdmbx.mongodb.net/HW1.restaurants

Connect View Help

Local

6 DBS 19 COLLECTIONS

☆ FAVORITE

HOSTS

- cluster0-shard-00-01.qdm...
- cluster0-shard-00-02.qdm...
- cluster0-shard-00-00.qdm...

CLUSTER

Replica Set (atlas-9ori8g-s

HW1.restaurants

DOCUMENTS 1 TOTAL SIZE 67B AVG. SIZE 67B INDEXES 1 TOTAL SIZE 20.5KB AVG. SIZE 20.5KB

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER { field: 'value' } OPTIONS FIND RESET ↺ ...

ADD DATA VIEW {}

Displaying documents 1 - 1 of 1 REFRESH

> MONGOSH

```
> db.restaurants.insertMany([{"name": "AlTazaj", "city": "Makkah", "score": 9 },
{ "name": "KFC", "city": "AlMadinah", "score": 8 },
{ "name": "Dominos pizza", "city": "Jeddah", "score": 9.5 },
{ "name": "Baba Khan", "city": "Jeddah", "score": 9 },
{ "name": "Krispy Kreme", "city": "Riyadh", "score": 8.5 }])
< { acknowledged: true,
  insertedIds:
    { '0': ObjectId("619b6f79b4f3972feacc8498"),
      '1': ObjectId("619b6f79b4f3972feacc8499"),
      '2': ObjectId("619b6f79b4f3972feacc849a"),
      '3': ObjectId("619b6f79b4f3972feacc849b"),
      '4': ObjectId("619b6f79b4f3972feacc849c") } }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

Windows taskbar: 89°F, 1:23 PM, 11/22/2021

Display all the documents in the collection restaurants:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with 1 document (67B) and 1 index (20.5KB). The MONGOSH console shows the command `db.restaurants.find()` and its output, which lists 5 documents with their IDs, names, cities, and scores.

```
> _MONGOSH
> db.restaurants.find()
< { _id: ObjectId("619b6ef8b4f3972feacc8497"),
  name: 'Albaik',
  city: 'Jeddah',
  score: 10 }
{ _id: ObjectId("619b6f79b4f3972feacc8498"),
  name: 'AlTazaj',
  city: 'Makkah',
  score: 9 }
{ _id: ObjectId("619b6f79b4f3972feacc8499"),
  name: 'KFC',
  city: 'AlMadinah',
  score: 8 }
{ _id: ObjectId("619b6f79b4f3972feacc849a"),
  name: 'Dominos pizza',
  city: 'Jeddah',
  score: 9.5 }
{ _id: ObjectId("619b6f79b4f3972feacc849b"),
  name: 'Baba Khan',
  city: 'Jeddah',
  score: 9 }
```

Display all the documents in the collection restaurants, but exclude the field `_id`:

MongoDB Compass - cluster0.qdmbx.mongodb.net/HW1.restaurants

Connect View Help

Local

6 DBS 19 COLLECTIONS

☆ FAVORITE

HOSTS

- cluster0-shard-00-01.qdm...
- cluster0-shard-00-02.qdm...
- cluster0-shard-00-00.qdm...

CLUSTER

Replica Set (atlas-9ori8g-s...

3 Nodes

EDITION

MongoDB 4.4.10 Enterprise

> MONGOSH

db.restaurants.find({}, {_id:0})

```
< { name: 'Albaik', city: 'Jeddah', score: 10 }
  { name: 'AlTazaj', city: 'Makkah', score: 9 }
  { name: 'KFC', city: 'AlMadinah', score: 8 }
  { name: 'Dominos pizza', city: 'Jeddah', score: 9.5 }
  { name: 'Baba Khan', city: 'Jeddah', score: 9 }
  { name: 'Krispy Kreme', city: 'Riyadh', score: 8.5 }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

HW1.restaurants Documents

DOCUMENTS 1 TOTAL SIZE 67B AVG. SIZE 67B INDEXES 1 TOTAL SIZE 20.5KB AVG. SIZE 20.5KB

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER { field: 'value' } OPTIONS FIND RESET ↺ ...

ADD DATA VIEW { } ☐

Displaying documents 1 - 6 of 6 REFRESH

```
_id: ObjectId("619b6ef8b4f3972feacc8497")
name: "Albaik"
city: "Jeddah"
```

Display all the restaurants which is in Jeddah city:

The screenshot shows the MongoDB Compass interface. The left sidebar displays the database structure: 6 DBS, 19 COLLECTIONS, and a FAVORITE button. The main panel shows the 'HW1.restaurants' collection with 1 document, 67B total size, and 1 index. The 'Documents' tab is selected, showing a list of documents. The command window at the bottom shows the query `db.restaurants.find({city:'Jeddah'})` and its results, which are three documents for 'Albaik', 'Dominos pizza', and 'Baba Khan'.

MongoDB Compass - cluster0.qdmbx.mongodb.net/HW1.restaurants

Connect View Help

Local

6 DBS 19 COLLECTIONS

☆ FAVORITE

HOSTS
cluster0-shard-00-01.adm...

>_MONGOSH

HW1.restaurants Documents

HW1.restaurants

DOCUMENTS 1 TOTAL SIZE 67B AVG. SIZE 67B INDEXES 1 TOTAL SIZE 20.5KB AVG. SIZE 20.5KB

Documents Aggregations Schema Explain Plan Indexes Validation

```
> db.restaurants.find({city:'Jeddah'})
< [ { _id: ObjectId("619b6ef8b4f3972feacc8497"),
      name: 'Albaik',
      city: 'Jeddah',
      score: 10 },
    { _id: ObjectId("619b6f79b4f3972feacc849a"),
      name: 'Dominos pizza',
      city: 'Jeddah',
      score: 9.5 },
    { _id: ObjectId("619b6f79b4f3972feacc849b"),
      name: 'Baba Khan',
      city: 'Jeddah',
      score: 9 } ]
```

Atlas atlas-9ori8g-shard-0 [primary] HW1>

Type here to search

89°F 1:39 PM 11/22/2021

Display all the restaurants which is achieved a score grater than or equal to 9:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with a table of documents. The table has columns for 'DOCUMENTS', 'TOTAL SIZE', 'AVG. SIZE', and 'INDEXES'. The first document is shown with a score of 10. The command window at the bottom shows the query `db.restaurants.find({score:{$gte:9}})` and the results of the query, which are four documents with scores 10, 9, 9.5, and 9. The status bar at the bottom shows the system time as 1:47 PM on 11/22/2021.

DOCUMENTS	TOTAL SIZE	AVG. SIZE	INDEXES	TOTAL SIZE	AVG. SIZE
1	67B	67B	1	20.5KB	20.5KB

```
> _MONGOSH
> db.restaurants.find({score:{$gte:9}})
< { _id: ObjectId("619b6ef8b4f3972feacc8497"),
  name: 'Albaik',
  city: 'Jeddah',
  score: 10 }
{ _id: ObjectId("619b6f79b4f3972feacc8498"),
  name: 'AlTazaj',
  city: 'Makkah',
  score: 9 }
{ _id: ObjectId("619b6f79b4f3972feacc849a"),
  name: 'Dominos pizza',
  city: 'Jeddah',
  score: 9.5 }
{ _id: ObjectId("619b6f79b4f3972feacc849b"),
  name: 'Baba Khan',
  city: 'Jeddah',
  score: 9 }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

Display all the restaurants which is achieved a score grater than or equal to 8 but less than 9.5:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with 1 document and 1 index. The query entered in the MONGODBSH console is:

```
> db.restaurants.find({score:{$gte:8,$lt:9.5}})
```

The results show four documents:

- `{ _id: ObjectId("619b6f79b4f3972feacc8498"), name: 'AlTazaj', city: 'Makkah', score: 9 }`
- `{ _id: ObjectId("619b6f79b4f3972feacc8499"), name: 'KFC', city: 'AlMadinah', score: 8 }`
- `{ _id: ObjectId("619b6f79b4f3972feacc849b"), name: 'Baba Khan', city: 'Jeddah', score: 9 }`
- `{ _id: ObjectId("619b6f79b4f3972feacc849c"), name: 'Krispy Kreme', city: 'Riyadh', score: 8.5 }`

The bottom status bar shows the connection to 'Atlas atlas-9ori8g-shard-0 [primary] HW1'.

Display all the restaurants which is in Jeddah and achieved a score grater than or equal to 9.5:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with a tab for 'Documents'. A table at the top right shows statistics: 1 document, 67B total size, 67B avg size, 1 index, 20.5KB total size, and 20.5KB avg size. The command window shows the following query and results:

```
> _MONGOSH
> db.restaurants.find({city:"Jeddah",score:{$gte:9.5}})
< { _id: ObjectId("619b6ef8b4f3972feacc8497"),
  name: 'Albaik',
  city: 'Jeddah',
  score: 10 }
  { _id: ObjectId("619b6f79b4f3972feacc849a"),
  name: 'Dominos pizza',
  city: 'Jeddah',
  score: 9.5 }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

The Windows taskbar at the bottom shows the search bar, task view, and several open applications including File Explorer, Mail, Chrome, and VS Code. The system tray displays the temperature as 90°F, the date as 11/22/2021, and the time as 1:52 PM.

Display all the restaurants which is contain 'Al' as first two letters of its name:

The screenshot shows the MongoDB Compass interface. The left sidebar displays the database structure: 6 DBS, 19 COLLECTIONS, and a cluster named 'Replica Set (atlas-9ori8g-s...)' with 3 Nodes. The main panel shows the 'HW1.restaurants' collection with 1 document. The document details are: `{ _id: ObjectId("619b6ef8b4f3972feacc8497"), name: "Albaik", city: "Jeddah", score: 10 }`. The bottom terminal window shows the following command and results:

```
> _MONGOSH
> db.restaurants.find({name:{$regex: /^Al/}})
< { _id: ObjectId("619b6ef8b4f3972feacc8497"),
  name: 'Albaik',
  city: 'Jeddah',
  score: 10 }
{ _id: ObjectId("619b6f79b4f3972feacc8498"),
  name: 'AlTazaj',
  city: 'Makkah',
  score: 9 }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

The Windows taskbar at the bottom shows the system time as 1:59 PM on 11/22/2021, with a temperature of 90°F and various system icons.

Display all the restaurants which is contains 'k' somewhere in its name, either k is big or small:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with 1 document and 1 index. The query in the MONGODB tab is `db.restaurants.find({name:{$regex: /[k]/i}})`. The results show four documents:

Document	name	city	score
1	'Albaik'	'Jeddah'	10
2	'KFC'	'AlMadinah'	8
3	'Baba Khan'	'Jeddah'	9
4	'Krispy Kreme'	'Riyadh'	8.5

The bottom status bar shows the system temperature as 90°F and the date as 11/22/2021.

Display all the restaurants by arranged the name of the restaurants in ascending order:

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'cluster0.qdmbx.mongodb.net/HW1.restaurants'. The left sidebar shows 'Local' with '6 DBS' and '19 COLLECTIONS'. The main panel displays the 'HW1.restaurants' collection with a table of documents. The table has columns for 'DOCUMENTS', 'TOTAL SIZE', 'AVG. SIZE', and 'INDEXES'. The 'DOCUMENTS' column shows '1' document, 'TOTAL SIZE' is '67B', 'AVG. SIZE' is '67B', and 'INDEXES' is '1' with a 'TOTAL SIZE' of '20.5KB' and 'AVG. SIZE' of '20.5KB'.

The query entered in the MONGODBSH console is:

```
> db.restaurants.find({}).sort({"name":1})
```

The result shows five documents sorted by name in ascending order:

```
< { _id: ObjectId("619b6f79b4f3972feacc8498"),  
  name: 'AlTazaj',  
  city: 'Makkah',  
  score: 9 }  
{ _id: ObjectId("619b6ef8b4f3972feacc8497"),  
  name: 'Albaik',  
  city: 'Jeddah',  
  score: 10 }  
{ _id: ObjectId("619b6f79b4f3972feacc849b"),  
  name: 'Baba Khan',  
  city: 'Jeddah',  
  score: 9 }  
{ _id: ObjectId("619b6f79b4f3972feacc849a"),  
  name: 'Dominos pizza',  
  city: 'Jeddah',  
  score: 9.5 }  
{ _id: ObjectId("619b6f79b4f3972feacc8499"),  
  name: 'KFC',  
  city: 'AlMadinah',  
  score: 9 }
```

The Windows taskbar at the bottom shows the system clock as 2:05 PM on 11/22/2021, with a temperature of 90°F and various system icons.

Update Dominos pizza restaurant which is in Jeddah to be in AlMadinah, and the name to Dominos Pizza, and the score to 10:

The screenshot shows the MongoDB Compass interface. The left sidebar displays the database structure with 6 DBS and 19 COLLECTIONS. The main panel shows the 'HW1.restaurants' collection with 1 document. The command window at the bottom shows a MongoDB update command that resulted in a syntax error.

Command Window:

```
> db.restaurants.updateOne({name:"Dominos pizza"},{$set:{city:"AlMadinah",name:"Dominos Pizza",score:10}})
SyntaxError: Unexpected token, expected ",", (1:102)

> 1 | db.restaurants.updateOne({name:"Dominos pizza"},{$set:{city:"AlMadinah",name:"Dominos Pizza",score:10}})
    |
    ^
db.restaurants.updateOne({name:"Dominos pizza"},{$set:{city:"AlMadinah",name:"Dominos Pizza",score:10}})
{ acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0 }
```

Task: Update Dominos pizza restaurant which is in Jeddah to be in AlMadinah, and the name to Dominos Pizza, and the score to 10:

Delete the KFC restaurant:

The screenshot shows the MongoDB Compass interface. On the left sidebar, under 'Local', there are 6 DBS and 19 COLLECTIONS. The 'HW1.restaurants' collection is selected. The main panel shows the 'Documents' tab for 'HW1.restaurants'. It displays a table with 1 document, 67B total size, and 67B average size. The document is a JSON object representing a restaurant. Below the table, there is a filter bar with the filter '{ field: 'value' }'. The bottom panel shows the MongoDB shell with the command `db.restaurants.deleteOne({name:"KFC"})` and the response `{ acknowledged: true, deletedCount: 1 }`. The status bar at the bottom indicates 'Atlas atlas-9ori8g-shard-0 [primary] HW1'.

MongoDB Compass - cluster0.qdmbx.mongodb.net/HW1.restaurants

Connect View Help

Local

6 DBS 19 COLLECTIONS

☆ FAVORITE

HOSTS

cluster0-shard-00-01.qdm...

cluster0-shard-00-02.qdm...

cluster0-shard-00-00.qdm...

CLUSTER

HW1.restaurants Documents

Documents 1 TOTAL SIZE 67B AVG. SIZE 67B INDEXES 1 TOTAL SIZE 20.5KB AVG. SIZE 20.5KB

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER { field: 'value' }

OPTIONS FIND RESET ...

ADD DATA VIEW ...

Displaying documents 1 - 6 of 6 REFRESH

> _MONGOSH

```
> db.restaurants.deleteOne({name:"KFC"})
< { acknowledged: true, deletedCount: 1 }
Atlas atlas-9ori8g-shard-0 [primary] HW1>
```

Type here to search

90°F 2:18 PM 11/22/2021