

## Connecting to server:

```
C:\Users\cretn\mongosh-1.3.1-win32-x64\bin>mongosh "mongodb+srv://cluster0.sptre.mongodb.net/myMongoLab" --apiVersion 1
--username megancretney
Enter password: *****
Current Mongosh Log ID: 62405ecc6b00c60e8db70fc7
Connecting to:      mongodb+srv://cluster0.sptre.mongodb.net/myMongoLab?appName=mongosh+1.3.1
Using MongoDB:      5.0.6 (API Version 1)
Using Mongosh:      1.3.1

For mongosh info see: https://docs.mongodb.com/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.

Atlas atlas-auyw8m-shard-0 [primary] myMongoLab>
```

## Exercise One:

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> show dbs
sample_airbnb      55 MB
sample_analytics   9.59 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.2 MB
sample_restaurants 7.17 MB
sample_supplies    1.18 MB
sample_training    56.5 MB
sample_weatherdata 3.15 MB
admin              381 kB
local              9.39 GB
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> use sample_weatherdata;
already on db sample_weatherdata
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> show collections
data
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find()
{
  _id: ObjectId("5553a998e4b02cf7151190b8"),
  st: 'x+47600-047900',
  ts: ISODate("1984-03-05T13:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -47.9, 47.6 ] },
  elevation: 9999,
  callLetters: 'VCSZ',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: -3.1, quality: '1' },
}
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find().pretty()
```

```
[
  {
    _id: ObjectId("5553a998e4b02cf7151190b8"),
    st: 'x+47600-047900',
    ts: ISODate("1984-03-05T13:00:00.000Z"),
    position: { type: 'Point', coordinates: [ -47.9, 47.6 ] },
    elevation: 9999,
    callLetters: 'VCSZ',
    qualityControlProcess: 'V020',
    dataSource: '4',
    type: 'FM-13',
    airTemperature: { value: -3.1, quality: '1' },
    dewPoint: { value: 999.9, quality: '9' },
    pressure: { value: 1015.3, quality: '1' },
    wind: {
      direction: { angle: 999, quality: '9' },
      type: '9',
      speed: { rate: 999.9, quality: '9' }
    },
    visibility: {
      distance: { value: 999999, quality: '9' },
      variability: { value: 'N', quality: '9' }
    },
    skyCondition: {
      ceilingHeight: { value: 99999, quality: '9', determination: '9' },
      cavok: 'N'
    },
  },

```

```
    skyConditionObservation: {
      totalCoverage: { value: '04', opaque: '99', quality: '1' },
      lowestCloudCoverage: { value: '99', quality: '9' },
      lowCloudGenus: { value: '99', quality: '9' },
      lowestCloudBaseHeight: { value: 99999, quality: '9' },
      midCloudGenus: { value: '99', quality: '9' },
      highCloudGenus: { value: '99', quality: '9' }
    },
    presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
  }
]
```

```
Type "it" for more
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find().count()
```

```
10000
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata>
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find({"skyCondition.ceilingHeight.value":750}).count()
673
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find({"skyCondition.ceilingHeight.value":750}).pretty();
[
  {
    _id: ObjectId("5553a998e4b02cf7151190bd"),
    st: 'x+59800-029700',
    ts: ISODate("1984-03-05T15:00:00.000Z"),
    position: { type: 'Point', coordinates: [ -29.7, 59.8 ] },
    elevation: 9999,
    callLetters: 'TFWB',
    qualityControlProcess: 'V020',
    dataSource: '4',
    type: 'FM-13',
    airTemperature: { value: 3.1, quality: '1' },
    dewPoint: { value: 999.9, quality: '9' },
    pressure: { value: 1019, quality: '1' },
    wind: {
      direction: { angle: 250, quality: '1' },
      type: 'N',
      speed: { rate: 15.4, quality: '1' }
    }
  },
]
```

```
Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> db.data.find(ObjectId("5553a998e4b02cf7151195d3")).pretty();
[
  {
    _id: ObjectId("5553a998e4b02cf7151195d3"),
    st: 'x+85600-124000',
    ts: ISODate("1984-03-05T15:00:00.000Z"),
    position: { type: 'Point', coordinates: [ -124, 85.6 ] },
    elevation: 9999,
    callLetters: 'ROBB',
    qualityControlProcess: 'V020',
    dataSource: '4',
    type: 'FM-13',
    airTemperature: { value: -22.9, quality: '1' },
    dewPoint: { value: -24.9, quality: '1' },
    pressure: { value: 1000.2, quality: '1' },
    wind: {
      direction: { angle: 270, quality: '1' },
      type: 'N',
      speed: { rate: 7, quality: '1' }
    }
  },
]
```

```

Atlas atlas-ayw8m-shard-0 [primary] sample_weatherdata> db.data.insertOne({
...   "st" : "x+85600-124000",
...   "ts" : ISODate("1984-03-07T13:00:00Z"),
...   "position" : {
...     "type" : "Point",
...     "coordinates" : [
...       -124,
...       85.6
...     ]
...   },
...   "elevation" : 8787,
...   "callLetters" : "ROBZ",
...   "qualityControlProcess" : "V020",
...   "dataSource" : "3",
...   "type" : "FM-13",
...   "airTemperature" : {
...     "value" : -22.9,
...     "quality" : "1"
...   },
...   "dewPoint" : {
...     "value" : -24.9,
...     "quality" : "1"
...   },
...   "pressure" : {
...     "value" : 1000.2,
...     "quality" : "1"
...   },
...   "wind" : {
...     "direction" : {
...       "angle" : 270,
...       "quality" : "1"
...     },
...     "type" : "N",
...     "speed" : {
...       "rate" : 7,
...       "quality" : "1"
...     }
...   },
...   "visibility" : {
...     "distance" : {
...       "value" : 7000,
...       "quality" : "1"
...     },
...     "variability" : {
...       "value" : "N",
...       "quality" : "9"
...     }
...   },
...   "skyCondition" : {
...     "ceilingHeight" : {
...       "value" : 760,
...       "quality" : "1"
...     }
...   }
... })

```

Exercise 2:

```

Atlas atlas-auyw8m-shard-0 [primary] sample_weatherdata> show dbs
sample_airbnb      55 MB
sample_analytics   9.59 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.2 MB
sample_restaurants 7.17 MB
sample_supplies    1.18 MB
sample_training    56.5 MB
sample_weatherdata 3.15 MB
admin              381 kB
local              9.39 GB
Atlas atlas-auyw8m-shard-0 [primary] things> db
things> use db
things> show dbs
sample_airbnb      55 MB
sample_analytics   9.59 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.2 MB
sample_restaurants 7.17 MB
sample_supplies    1.18 MB
sample_training    56.5 MB
sample_weatherdata 3.15 MB
admin              381 kB
local              9.39 GB
Atlas atlas-auyw8m-shard-0 [primary] things>

```

```

Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.insertOne({name:"horseback riding"})
{
  acknowledged: true,
  insertedId: ObjectId("624068ed94bba4bd9a1a3ce7")
}
Atlas atlas-auyw8m-shard-0 [primary] things>

```

```

Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.find()
[
  {
    _id: ObjectId("624068c894bba4bd9a1a3ce6"),
    name: 'horseback riding'
  },
  {
    _id: ObjectId("624068ed94bba4bd9a1a3ce7"),
    name: 'horseback riding'
  }
]
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.find().pretty()
[
  {
    _id: ObjectId("624068c894bba4bd9a1a3ce6"),
    name: 'horseback riding'
  },
  {
    _id: ObjectId("624068ed94bba4bd9a1a3ce7"),
    name: 'horseback riding'
  }
]
Atlas atlas-auyw8m-shard-0 [primary] things> 

```

```

Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.insert({"name":"cycling","equipment":["bicycle","helmet","air pump"]})
acknowledged: true,
insertedIds: { '0': ObjectId("6240696f94bba4bd9a1a3ce8") }
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.insert({"name":"basketball","equipment":["ball","shoes","court","rim","game"]})
acknowledged: true,
insertedIds: { '0': ObjectId("6240696f94bba4bd9a1a3ce9") }
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.insert({"name":"archery","equipment":["bow","arrows"]})
acknowledged: true,
insertedIds: { '0': ObjectId("6240697194bba4bd9a1a3cea") }
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.find().pretty()
(
  {
    _id: ObjectId("624068c894bba4bd9a1a3ce6"),
    name: 'horseback riding'
  },
  {
    _id: ObjectId("624068ed94bba4bd9a1a3ce7"),
    name: 'horseback riding'
  },
  {
    _id: ObjectId("6240696f94bba4bd9a1a3ce8"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  },
  {
    _id: ObjectId("6240696f94bba4bd9a1a3ce9"),
    name: 'basketball',
    equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
  }
)

```

```

{
  _id: ObjectId("6240696f94bba4bd9a1a3ce9"),
  name: 'basketball',
  equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
},
{
  _id: ObjectId("6240697194bba4bd9a1a3cea"),
  name: 'archery',
}
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.updateOne({name:"horseback riding"},{$set : {equipment:["horse","saddle","helmet"]}})
{
  acknowledged: true,
  insertedId: null, shard-0 [primary] things>
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.find({equipment:"helmet"})
[
  {
    _id: ObjectId("624068c894bba4bd9a1a3ce6"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  },
  {
    _id: ObjectId("6240696f94bba4bd9a1a3ce8"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  }
]
Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.update({name:"ultimate frisbee"},{name:"ultimate frisbee",equipment:["friends","frisbee"]},(upsert: true))

```

```

Atlas atlas-auyw8m-shard-0 [primary] things> db.hobbies.remove({name:"archery"})
{ acknowledged: true, deletedCount: 1 }
Atlas atlas-auyw8m-shard-0 [primary] things> 

```