

# Teagan Norrgard MongoDB Lab

## Exercise 1

1:

```
teagannorrgard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
Last login: Sun Mar 27 13:57:58 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
(base) Teagans-MacBook-Air:~ teagannorrgard$ mongosh "mongodb+srv://cluster0.av6so.mongodb.net/" --apiVersion 1 --username trnorrgard
[Enter password: *****]
Current Mongosh Log ID: 6240a6af0886e850dfdc8621
Connecting to:      mongodb+srv://cluster0.av6so.mongodb.net/?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/mongosh-shell/
```

2:

```
teagannorrgard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
[Enter password: *****]
Current Mongosh Log ID: 6240a6af0886e850dfdc8621
Connecting to:      mongodb+srv://cluster0.av6so.mongodb.net/?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/mongosh-shell/

[Atlas atlas-mgvqky-shard-0 [primary] test> show dbs
sample_airbnb      55 MB
sample_analytics   9.58 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.3 MB
sample_restaurants 8.8 MB
sample_supplies    1.18 MB
sample_training    60.1 MB
sample_weatherdata 2.94 MB
admin              385 kB
local              6.09 GB

[Atlas atlas-mgvqky-shard-0 [primary] test> use sample_weatherdata
switched to db sample_weatherdata
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> show collections
data
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> ]
```

3:

```
teagannorrgard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
data
[Atlas atlas-mgvqky-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' },
    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: {
```

```
teagannorrard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
Type "it" for more
[Atlas atlas-mgvqky-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: {
  }
}
]

type "it" for more
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> db.data.find().count() ]
(node:39177) [MONGODB DRIVER] Warning: cursor.count is deprecated and will be removed in the next major version, please use 'collection.estimatedDocumentCount' or 'collection.countDocuments' instead
(Use `node --trace-warnings ...` to show where the warning was created)
10000
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> ]
```

4:

```
teagannorrard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
(Use `node --trace-warnings ...` to show where the warning was created)
10000
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> db.data.find({"skyCondition": "on.ceilingHeight.value":750}).count() ]
673
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> db.data.find({"skyCondition": "on.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' }
    },
    skyCondition: {
  }
}
]
```

5:

```
teagannorrgard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
]
Type "it" for more
Atlas atlas-mgvqky-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: 'R08B',
    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' }
    },
    visibility: {
      distance: { value: 7000, quality: '1' },
      variability: { value: 'N', quality: '9' }
    }
  }
]
```

6:

```
teagannorrgard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
]
Atlas atlas-mgvqky-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" : "R0BZ",
...   "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"
...   }
... })
```

```
teagannorrard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
{
  "quality" : "1"
},
{
  "visibility" : {
    "distance" : {
      "value" : 7000,
      "quality" : "1"
    },
    "variability" : {
      "value" : "N",
      "quality" : "9"
    }
  },
  "skyCondition" : {
    "ceilingHeight" : {
      "value" : 760,
      "quality" : "1",
      "determination" : "C"
    }
  }
}
[... })
{
  acknowledged: true,
  insertedId: ObjectId("6240a8790886e850dfdc8622")
}
Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata>
```

```
teagannorrard — mongosh mongodb+srv://cluster0.av6so.mongodb.net/...
insertedId: ObjectId("6240a8790886e850dfdc8622")
}
Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> db.data.find(ObjectId("6240a8790886e850dfdc8622")).pretty()
[
  {
    _id: ObjectId("6240a8790886e850dfdc8622"),
    st: 'x+85600-124000',
    ts: ISODate("1984-03-07T13:00:00.000Z"),
    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' }
    }
  }
]
```

## Exercise 2:

1:

```
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> show dbs
sample_airbnb      55 MB
sample_analytics   9.58 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.3 MB
sample_restaurants 8.8 MB
sample_supplies    1.18 MB
sample_training    60.1 MB
sample_weatherdata 2.96 MB
admin              385 kB
local              6.09 GB
Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata>
```

2:

```
Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> use sample_weatherdata
Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata>
```

3:

```
[Atlas atlas-mgvqky-shard-0 [primary] sample_weatherdata> use things
switched to db things
[Atlas atlas-mgvqky-shard-0 [primary] things> show dbs
sample_airbnb      55 MB
sample_analytics   9.58 MB
sample_geospatial 1.46 MB
sample_guides      41 kB
sample_mflix       52.3 MB
sample_restaurants 8.8 MB
sample_supplies    1.18 MB
sample_training    60.1 MB
sample_weatherdata 2.96 MB
admin              385 kB
local              6.09 GB
Atlas atlas-mgvqky-shard-0 [primary] things>
```

4:

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.insert({name:"horseback riding", "equipment":["horse", "saddle", "helmet"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("6240af680886e850dfdc8625") }
}
```

5:

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.find()
[
  {
    _id: ObjectId("6240af680886e850dfdc8625"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  }
]
Atlas atlas-mgvqky-shard-0 [primary] things>
```

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.find().pretty()
[
  {
    _id: ObjectId("6240af680886e850dfdc8625"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  }
]
Atlas atlas-mgvqky-shard-0 [primary] things>
```

6:

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.insert({"name":"cycling",
equipment":["bicycle","helmet","air pump"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("6240b0200886e850dfdc8626") }
}
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.insert({"name":"basketball",
equipment:["ball","shoes","court","rim","game"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("6240b0270886e850dfdc8627") }
}
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.insert({"name":"archery",
equipment:["bow","arrows"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("6240b02e0886e850dfdc8628") }
}
Atlas atlas-mgvqky-shard-0 [primary] things>
```

```
[name:"horseback riding"] [equipment: ["horse", "saddle", "helmet"]]
```

7:

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.find().pretty()
[
  {
    _id: ObjectId("6240af680886e850dfdc8625"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  },
  {
    _id: ObjectId("6240b0200886e850dfdc8626"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  },
  {
    _id: ObjectId("6240b0270886e850dfdc8627"),
    name: 'basketball',
    equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
  },
  {
    _id: ObjectId("6240b02e0886e850dfdc8628"),
    name: 'archery',
    equipment: [ 'bow', 'arrows' ]
  }
]
Atlas atlas-mgvqky-shard-0 [primary] things>
```

8:

I had already added equipment at first since I thought the output for #5 was supposed to include it

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.updateOne({name:"horseback
riding"},{$set : {equipment:["horse","saddle","helmet"]}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 0,
  upsertedCount: 0
}
Atlas atlas-mgvqky-shard-0 [primary] things>
```

9:

```
[Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.find({equipment:"helmet"})
[
  {
    _id: ObjectId("6240af680886e850dfdc8625"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  },
  {
    _id: ObjectId("6240b0200886e850dfdc8626"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  }
]
Atlas atlas-mgvqky-shard-0 [primary] things>
```

10:

```
Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.update({name:"ultimate frisbee"},{$set:{name:"ultimate frisbee",equipment:["friends","frisbee"]}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
Atlas atlas-mgvqky-shard-0 [primary] things>
to add the "delayed" field to the document you will want to use the $set operator
```

11:

```
2 | '
Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.remove({ObjectId:"6240b0270886e850dfdc8627"})
{ acknowledged: true, deletedCount: 0 }
Atlas atlas-mgvqky-shard-0 [primary] things> db.hobbies.remove({name:"archery"})
{ acknowledged: true, deletedCount: 1 }
Atlas atlas-mgvqky-shard-0 [primary] things>
```