

Exercise 1

2)

```
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> show collections;
data
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> show dbs;
sample_airbnb      55 MB
sample_analytics   9.61 MB
sample_geospatial 1.99 MB
sample_guides      41 kB
sample_mflix       49.1 MB
sample_restaurants 6.97 MB
sample_supplies    1.2 MB
sample_training    57.6 MB
sample_weatherdata 2.96 MB
things             73.7 kB
admin              377 kB
local              12.4 GB
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> use sample_weatherdata;
already on db sample_weatherdata
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> show collections;
```

3)

```
lowCloudGenus: { value: '00', quality: '1' },
lowestCloudBaseHeight: { value: 99999, quality: '9' },
midCloudGenus: { value: '00', quality: '1' },
highCloudGenus: { value: '00', quality: '1' }
},
presentWeatherObservationManual: [ { condition: '02', quality: '1' } ]
},
{
  _id: ObjectId("5553a998e4b02cf7151190cb"),
  st: 'x+43400-065600',
  ts: ISODate("1984-03-05T18:00:00.000Z"),
  position: { type: 'Point', coordinates: [ -65.6, 43.4 ] },
  elevation: 9999,
  callLetters: 'CG26',
  qualityControlProcess: 'V020',
  dataSource: '4',
  type: 'FM-13',
  airTemperature: { value: 999.9, quality: '9' },
  dewPoint: { value: 999.9, quality: '9' },
  pressure: { value: 9999.9, quality: '9' },
  wind: {
    direction: { angle: 270, quality: '1' },
    type: 'N',
    speed: { rate: 7.7, quality: '1' }
  },
  visibility: {
    distance: { value: 10000, quality: '1' },
    variability: { value: 'N', quality: '9' }
  },
  skyCondition: {
    ceilingHeight: { value: 22000, quality: '1', determination: 'C' },
    cavok: 'N'
  },
  sections: [ 'AG1', 'AY1', 'GF1', 'MW1' ],
  precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 0 },
  pastWeatherObservationManual: [
    {
      atmosphericCondition: { value: '0', quality: '1' },
      period: { value: 6, quality: '1' }
    }
  ],
  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-e737v5-shard-0 [primary] sample_weatherdata> db.data.find().count();
10001
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata>
```

4)

```
Type "it" for more
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> db.data.find({"sky
Condition.ceilingHeight.value":750}).count();
673
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> db.data.find({"sky
Condition.ceilingHeight.value":750}).pretty();
```

5)

```

Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> db.data.find(ObjectId("5553a998e4b195d3")).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' }
    },
    visibility: {
      distance: { value: 7000, quality: '1' },
      variability: { value: 'N', quality: '9' }
    },
    skyCondition: {
      ceilingHeight: { value: 750, quality: '1', determination: 'C' },
      cavok: 'N'
    },
    sections: [ 'AG1', 'AY1', 'GF1', 'MA1', 'MD1', 'MW1' ],
    precipitationEstimatedObservation: { discrepancy: '2', estimatedWaterDepth: 1 },
    pastWeatherObservationManual: [
      {
        atmosphericCondition: { value: '7', quality: '1' },
        period: { value: 3, quality: '1' }
      }
    ],
    skyConditionObservation: {
      totalCoverage: { value: '08', opaque: '99', quality: '1' },
      lowestCloudCoverage: { value: '08', quality: '1' },
      lowCloudGenus: { value: '05', quality: '1' },
      lowestCloudBaseHeight: { value: 800, quality: '1' },
      midCloudGenus: { value: '99', quality: '9' },
      highCloudGenus: { value: '99', quality: '9' }
    },
    atmosphericPressureObservation: {
      altimeterSetting: { value: 9999.9, quality: '9' },
      stationPressure: { value: 1000.2, quality: '1' }
    },
    atmosphericPressureChange: {
      tendency: { code: '2', quality: '1' },
      quantity3Hours: { value: 0.7, quality: '1' },
      quantity24Hours: { value: 99.9, quality: '9' }
    },
    presentWeatherObservationManual: [ { condition: '71', quality: '1' } ]
  }
]
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata>

```

6)

```
{
  acknowledged: true,
  insertedId: ObjectId("623d39b73c03cdca0eba4c15")
}
```

Exercise 2

1)

```
}
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> show dbs
sample_airbnb      55 MB
sample_analytics   9.61 MB
sample_geospatial 1.99 MB
sample_guides      41 kB
sample_mflix       49.1 MB
sample_restaurants 6.97 MB
sample_supplies    1.2 MB
sample_training    57.6 MB
sample_weatherdata 2.96 MB
things             73.7 kB
admin              377 kB
local              12.4 GB
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> █
```

2)

```
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> db
sample_weatherdata
Atlas atlas-e737v5-shard-0 [primary] sample_weatherdata> █
```

3)

```
[Atlas atlas-e737v5-shard-0 [primary] things> show dbs
sample_airbnb      55 MB
sample_analytics   9.61 MB
sample_geospatial 1.99 MB
sample_guides      41 kB
sample_mflix       49.1 MB
sample_restaurants 6.97 MB
sample_supplies    1.2 MB
sample_training    57.6 MB
sample_weatherdata 2.96 MB
things             73.7 kB
admin              377 kB
local              12.4 GB
Atlas atlas-e737v5-shard-0 [primary] things> use things
already on db things
Atlas atlas-e737v5-shard-0 [primary] things> show dbs █
```

4)

```
Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.insert({name:"horseback riding"})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("623d3a613c03cdca0eba4c16") }
}
Atlas atlas-e737v5-shard-0 [primary] things> █
```

5)

```

Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.find()
[
  {
    _id: ObjectId("623d359f3c03cdca0eba4c0e"),
    name: 'horseback riding'
  },
  {
    _id: ObjectId("623d36403c03cdca0eba4c0f"),
    name: 'basketball',
    equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
  },
  {
    _id: ObjectId("623d36433c03cdca0eba4c10"),
    name: 'archery',
    equipment: [ 'bow', 'arrows' ]
  },
  {
    _id: ObjectId("623d36483c03cdca0eba4c11"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  },
  {
    _id: ObjectId("623d36483c03cdca0eba4c12"),
    name: 'basketball',
    equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
  },
  {
    _id: ObjectId("623d36493c03cdca0eba4c13"),
    name: 'archery',
    equipment: [ 'bow', 'arrows' ]
  },
  {
    _id: ObjectId("623d3a613c03cdca0eba4c16"),
    name: 'horseback riding'
  }
]
Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.find().pretty()

```

```

Atlas atlas-e737v5-shard-0 [primary] things> {
...   "_id" : ObjectId("606b5e9d37c1606354c39e3d"),
...   "name" : "horseback riding",
...   "equipment" : [
...     "horse",
...     "saddle",
...     "helmet"
...   ]
... }

```

6)

```

    insertedIds: { '0': ObjectId("623d3ac63c03cdca0eba4c17") }
  }
Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.insert({"name":"cycling","equipment":["bicycle","helmet","air pump"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("623d3acf3c03cdca0eba4c1a") }
}
Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.insert({"name":"basketball","equipment":["ball","shoes","court","rim","game"]})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("623d3ad23c03cdca0eba4c1b") }
}
Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.insert({"name":"archery","equipment":["bow","arrows"]})

```

7)

```

  _id: ObjectId("623d3a613c03cdca0eba4c16"),
  name: 'horseback riding'
},
{
  _id: ObjectId("623d3abb3c03cdca0eba4c17"),
  name: 'basketball',
  equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
},
{
  _id: ObjectId("623d3ac33c03cdca0eba4c18"),
  name: 'basketball',
  equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
},
{
  _id: ObjectId("623d3ac63c03cdca0eba4c19"),
  name: 'archery',
  equipment: [ 'bow', 'arrows' ]
},
{
  _id: ObjectId("623d3acf3c03cdca0eba4c1a"),
  name: 'cycling',
  equipment: [ 'bicycle', 'helmet', 'air pump' ]
},
{
  _id: ObjectId("623d3ad23c03cdca0eba4c1b"),
  name: 'basketball',
  equipment: [ 'ball', 'shoes', 'court', 'rim', 'game' ]
}
Atlas atlas-e737v5-shard-0 [primary] things>

```

8)

```

Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.updateOne({name:"horseback riding"},{$set :{equipment:["horse","saddle","helmet"]}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-e737v5-shard-0 [primary] things>

```

9)

```

Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.find({equipment:"helmet"})
[
  {
    _id: ObjectId("623d359f3c03cdca0eba4c0e"),
    name: 'horseback riding',
    equipment: [ 'horse', 'saddle', 'helmet' ]
  },
  {
    _id: ObjectId("623d36483c03cdca0eba4c11"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  },
  {
    _id: ObjectId("623d3acf3c03cdca0eba4c1a"),
    name: 'cycling',
    equipment: [ 'bicycle', 'helmet', 'air pump' ]
  }
]
Atlas atlas-e737v5-shard-0 [primary] things> █

```

10)

```

Atlas atlas-gc1px1-shard-0 [primary] test> db.hobbies.update({name:"ultimate frisbee"},{$set: {name:"ultimate frisbee",
equipment:["friends","frisbee"]}}, {upsert: true})
{
  acknowledged: true,
  insertedId: ObjectId("6240c819b477dc1edf9c9811"),
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 1
}

```

11)

```

Atlas atlas-e737v5-shard-0 [primary] things> db.hobbies.remove({name:"archery"})
{ acknowledged: true, deletedCount: 3 }
Atlas atlas-e737v5-shard-0 [primary] things> █

```

Reference: CRUD Operations

Create