

Few Commands to test after connections:

Command	Expected Output	Notes
show dbs	<pre>admin 40.00 KiB config 72.00 KiB db 128.00 KiB local 40.00 KiB</pre>	All Databases are shown
Use db	<pre>switched to db db</pre>	Connect and use db
show collections	<pre>Students</pre>	Show all tables
db.foo.insert({"bar" : "baz"})		Insert a record to collection. Create Collection if not exists
db.foo.batchInsert([{"_id" : 0}, {"_id" : 1}, {"_id" : 2}])		Insert more than one document
db.foo.find()		Print all rows
db.foo.remove()		Remove foo table

Documents:

At the heart of MongoDB is the document: an ordered set of keys with associated values.

The representation of a document varies by programming language, but most languages have a data structure that is a natural fit, such as a map, hash, or dictionary.

```
{"greeting": "Hello, world!"}
```

```
{
  "name" : "John Doe",
  "address" : {
    "street" : "123 Park Street",
    "city" : "Anytown",
    "state" : "NY"
  }
}
```

Collections:

Collections A collection is a group of documents. If a document is the MongoDB analog of a row in a relational database, then a collection can be thought of as the analog to a table.

Database:

MongoDB stores data records as documents (specifically BSON documents) which are gathered together in collections. A database stores one or more collections of documents. You can manage MongoDB databases and collections in the UI for deployments hosted in MongoDB Atlas.

Datatype:

More details [link](#)

Where each attribute inside can be of multiple data types.

Load the document:

Download the student csv from this [link](#)

Import the data to the collection created [link](#)

ADD, UPDATE AND DELETE THE DATA :

Creating a Database:

On the server running MongoDB, type **MONGO** to open up a connection to the database:

Our first command **use userdb** creates a new database with the name of “userdb” you can put whatever name you want in the format **use <databasename>**.

```
use userdb
```

```
Output  
userdb
```

Execute the following command to insert some data into your database:

```
db.people.insert({ name: "Andrew", age: 33, hobbies: ["Coding", "Gaming",  
"Cooking"], hungry: false})
```

```
Output  
WriteResult({ "nInserted" : 1 })
```

Retrieving Data:

Once you have data in your collection, you can start to search and filter that data out using **.find(<parameters>)**

To verify that your data has been added to the “people” document, use the **find()** syntax. Execute this command in the MongoDB console:

```
db.people.find()
```

```
Output  
{ "_id" : ObjectId("5c08c98f3d828385a2162d94"), "name" : "Andrew", "age" :  
33, "hobbies" : [ "Coding", "Gaming", "Cooking" ], "hungry" : false }
```

If you want to turn this into pretty JSON format, use **.pretty()** after **.find()** :

```
db.people.find().pretty()
Output
{
  "_id" : ObjectId("5c08c98f3d828385a2162d94"),
  "name" : "Andrew",
  "age" : 33,
  "hobbies" : [
    "Coding",
    "Gaming",
    "Cooking"
  ],
  "hungry" : false
}
```

Try to add more data and then we'll work on modifying and searching the data.

```
db.people.insert({ name: "Riley", age: 3, hobbies: ["Sleeping",
"Barking", "Snuggles"], hungry: true})

db.people.insert({ name: "You", age: 30, hobbies: ["Coding", "Reading
DigitalOcean Articles", "Creating Droplets"], hungry: true})
```

Updating Data:

To modify your data, use the **.update()** function. but first let's look at our data to see what we want to change:

```
db.people.update({ name: "You" }, {$set: { name: "Sammy" }})
Output
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

If we now check that record with our newly set name:

```
db.people.find({ name: "Sammy" }).pretty()
Output
{
  "_id" : ObjectId("5c08cc2e3d828385a2162d96"),
  "name" : "Sammy",
  "age" : 30,
  "hobbies" : [
    "Coding",
    "Reading DigitalOcean Articles",
    "Creating Droplets"
  ],
  "hungry" : true
}
```

The **name** key value has been set to its new value of **Sammy**.

Deleting Data (D):

Remove data using the `.remove()` function. You can remove data in a couple of ways, but the safest way is to locate a record to delete by using the unique `_id` so that, for instance, you have multiple `"Sammy"` entries, removing by the `name: "Sammy"` would remove all of them.

```
db.people.remove({ _id: ObjectId("5c08cc2e3d828385a2162d96") })
```

Output

```
WriteResult({ "nRemoved" : 1 })
```

```
db.people.find().pretty()
```

Output

```
{
  "_id" : ObjectId("5c08c98f3d828385a2162d94"),
  "name" : "Andrew",
  "age" : 33,
  "hobbies" : [
    "Coding",
    "Gaming",
    "Cooking"
  ],
  "hungry" : false
}
{
  "_id" : ObjectId("5c08cbea3d828385a2162d95"),
  "name" : "Riley",
  "age" : 3,
  "hobbies" : [
    "Sleeping",
    "Barking",
    "Snuggles"
  ],
  "hungry" : true
}
```

The `"Sammy"` entry has been removed safely, without affecting any other possible `"Sammy"` records if they were to exist.