



NoSQL Database - MongoDB

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2. Installing MongoDB

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Download & Install MongoDB Community Server
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Download & Install MongoDB Compass GUI
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Configure Environment Variables (Optional)

C:\Program Files\MongoDB\Server\5.0\bin
- 4

We can start writing code in Mongo Shell

1. Displaying Databases

```
Show dbs
---
> show dbs
admin    0.000GB
config  0.000GB
local    0.000GB
>
```

2. Create Database, Collection & Display the Collections

```
use dbName
db.createCollection('CollectionName')
show collections

> use champ
switched to db champ
> db.createCollection('booklist')
{ "ok" : 1 }
> show collections
booklist
>
```

3. Delete Collection

```
db.collectionName.drop()

> db.createCollection('dummy')
{ "ok" : 1 }
> show collections
booklist
dummy
> db.dummy.drop()
true
> show collections
booklist
>
```

4. Delete Database

```
db.dropDatabase()

> db.dropDatabase()
{ "ok" : 1 }
> show dbs
admin    0.000GB
config  0.000GB
local    0.000GB
```

3. Commands

5. Create Collection (Alter) with inserting Data and Displaying output

```
db.collectionName.insert(data in dict. format)
db.collectionName.find()
```

```
> db.booklist.insert({Title:"Attitude is Everything",Price:99})
WriteResult({ "nInserted" : 1 })
> show collections
booklist
> db.booklist.find()
{ "_id" : ObjectId("611cc232f04533419be72e5d"), "Title" : "Attitude is Everything", "Price" : 99 }
>
```

To show in better JSON Format

```
> db.booklist.find().pretty()
{
  "_id" : ObjectId("611cc232f04533419be72e5d"),
  "Title" : "Attitude is Everything",
  "Price" : 99
}
```

It contains Auto generated Object ID

- It is 12 Byte Hexa Decimal value
- 4Byte - Time Stamp
- 3Byte - Machine Identifier
- 2Byte - Process Id
- 3Byte - random Incremental value

6. Locate data

```
db.collectionName.find({whatToFind}).pretty()

> db.booklist.find({Price:99}).pretty()
{
  "_id" : ObjectId("611cc232f04533419be72e5d"),
  "Title" : "Attitude is Everything",
  "Price" : 99
}
```

Greater than or Equal

```
> db.booklist.find({Price:$gte:90}).pretty()
{
  "_id" : ObjectId("611cc232f04533419be72e5d"),
  "Title" : "Attitude is Everything",
  "Price" : 99
}
```

7. Replace Data

```
db.collectionName.update(identifier,{ $set:{
ChangeParameter}})

> db.booklist.update({Price:99},{$set:{Title:"Rich Dad Poor Dad"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 0 })
> db.booklist.find().pretty()
{
  "_id" : ObjectId("611cc232f04533419be72e5d"),
  "Title" : "Rich Dad Poor Dad",
  "Price" : 99
}
```

Without Set, it will remove rest data and change only current data