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<b>Class: BECO</b>	<b>Batch: 2</b>
<b>Roll no: 19CO23</b>	<b>Experiment No: 3</b>

**Title: To install and configure MongoDB/ Cassandra/ HBase/ Hypertable to execute NoSQL commands.**

```

aiktc@aiktc2:~$ sudo apt-get install mongodb
aiktc@aiktc2:~$ sudo add-apt-repository ppa:openafs/stable
aiktc@aiktc2:~$ sudo apt-get update
aiktc@aiktc2:~$ sudo apt install --reinstall openafs-client openafs-modules-dkms
aiktc@aiktc2:~$ sudo service mongodb start
aiktc@aiktc2:~$ mongo # starting the mongodb database
MongoDB shell version v5.3.1

```

```

> show dbs # display all the databases of your machine
admin 0.000GB
config 0.000GB
local 0.000GB

```

```

> use mydb; #create a database first.
switched to db mydb

```

```

> db; # current database
Mydb

```

```

> db.mycol.insert({"name":"Mark"});
WriteResult({ "nInserted" : 1 })

```

```

> show collections
Mycol

```

```

> db.mycol.find()
{ "_id" : ObjectId("6319bba9adf1777fc4ab39a5"), "name" : "Mark" }
> use shopping;
switched to db shopping

```

```

> db.products.insertOne({name:"abc",price:30,color:"red"}); # inside this database we need to create our Collection (tables).
{

```

```
  "acknowledged" : true,  
  "insertedId" : ObjectId("6319bcc9adf1777fc4ab39a6")  
}
```

```
> db.products.find()                # fetch the document from collection  
{ "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"), "name" : "abc", "price" : 30, "color" : "red" }
```

```
> db.products.find().pretty()        # return records in prettier way(formatted)  
{  
  "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"),  
  "name" : "abc",  
  "price" : 30,  
  "color" : "red"  
}
```

```
> db.products.insertMany([{"name":"mno","price":50}, {"name":"pqr","price":100,"qty":1}]); #to add  
multiple records at a time
```

```
{  
  "acknowledged" : true,  
  "insertedIds" : [  
    ObjectId("6319bd1fadf1777fc4ab39a8"),  
    ObjectId("6319bd1fadf1777fc4ab39a9")  
  ]  
}
```

```
> db.products.find().pretty()  
{  
  "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"),  
  "name" : "abc",  
  "price" : 30,  
  "color" : "red"  
}  
{  
  "_id" : ObjectId("6319bd1fadf1777fc4ab39a8"),  
  "name" : "mno",  
  "price" : 50  
}  
{  
  "_id" : ObjectId("6319bd1fadf1777fc4ab39a9"),  
  "name" : "pqr",  
  "price" : 100,  
  "qty" : 1  
}
```

```
}
```

```
> db.products.updateOne({name:"mno"},{$set:{price:100,qty:10}}); # give ObjectID manually
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
> db.products.find().pretty()
```

```
{
  "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"),
  "name" : "abc",
  "price" : 30,
  "color" : "red"
}
{
  "_id" : ObjectId("6319bd1fADF1777fc4ab39a8"),
  "name" : "mno",
  "price" : 100,
  "qty" : 10
}
{
  "_id" : ObjectId("6319bd1fADF1777fc4ab39a9"),
  "name" : "pqr",
  "price" : 100,
  "qty" : 1
}
```

```
> db.products.updateMany({name:"abc"},{$set:{ qty:150}}); #update multiple documents
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
> db.products.find().pretty()
```

```
{
  "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"),
  "name" : "abc",
  "price" : 30,
  "color" : "red",
  "qty" : 150
}
{
  "_id" : ObjectId("6319bd1fADF1777fc4ab39a8"),
  "name" : "mno",
  "price" : 100,
```

```

    "qty" : 10
  }
  {
    "_id" : ObjectId("6319bd1fadf1777fc4ab39a9"),
    "name" : "pqr",
    "price" : 100,
    "qty" : 1
  }
}

```

```

> db.products.deleteOne({_id:"p01"});           # delete the document

```

```

{ "acknowledged" : true, "deletedCount" : 0 }

```

```

> db.products.find().pretty()

```

```

{
  "_id" : ObjectId("6319bcc9adf1777fc4ab39a6"),
  "name" : "abc",
  "price" : 30,
  "color" : "red",
  "qty" : 150
}
{
  "_id" : ObjectId("6319bd1fadf1777fc4ab39a8"),
  "name" : "mno",
  "price" : 100,
  "qty" : 10
}
{
  "_id" : ObjectId("6319bd1fadf1777fc4ab39a9"),
  "name" : "pqr",
  "price" : 100,
  "qty" : 1
}

```

```

> db.products.drop();           # delete entire database

```

```

True

```

```

> db.dropDatabase();           # drop all the collections of the database.

```

```

{ "ok" : 1 }

```

```

> show dbs;

```

```

admin  0.000GB

```

```

config 0.000GB

```

```

local  0.000GB

```

```

mydb   0.000GB

```

**Conclusion:** Successfully installed and configured mongodb database and performed CRUD operations.