

Author name: Aditi Bairagi  
Roll no:153  
PRN no: UCS22F2153  
Batch :AS4

## Assignment No:07

**problem statement:** Study of Open Source NOSQL Database : MongoDB  
(Installation, Basic CRUD operations, Execution)

### Installation:

If mongoDB already install on terminal then it will show following information.

```
(base) student@student-Veriton-M200-H61:~$ mongo
MongoDB shell version v3.6.8
connecting to: mongodb://127.0.0.1:27017
Implicit session: session { "id" : UUID("2d91bb1b-e620-40b2-92a6-2b89e2402da0") }
MongoDB server version: 3.6.8
Server has startup warnings:
2023-04-27T09:54:01.507+0530 I STORAGE [initandlisten]
2023-04-27T09:54:01.507+0530 I STORAGE [initandlisten] ** WARNING: Using the XFS
filesystem is strongly recommended with the WiredTiger storage engine
2023-04-27T09:54:01.507+0530 I STORAGE [initandlisten] ** See
http://dochub.mongodb.org/core/prodnotes-filesystem
2023-04-27T09:54:19.430+0530 I CONTROL [initandlisten]
2023-04-27T09:54:19.430+0530 I CONTROL [initandlisten] ** WARNING: Access control is not
enabled for the database.
2023-04-27T09:54:19.430+0530 I CONTROL [initandlisten] ** Read and write access to
data and configuration is unrestricted.
2023-04-27T09:54:19.430+0530 I CONTROL [initandlisten]
```

### Operations:

#### 1. To show databases.

**Syntax:** `show dbs;`  
admin 0.000GB  
company 0.000GB  
config 0.000GB  
dbRucha 0.000GB  
inventory 0.000GB  
local 0.000GB  
nisha 0.000GB  
pranav 0.000GB  
resturant 0.000GB

#### 2. creating database in mongoDB.

**Syntax:** `use roll153;`  
switched to db roll153

### 3. show collections.

**Syntax:**show collections;

emp

### 4.creating collection.

**Syntax:**

```
db.emp.insert({eno:223,ename:"aaa",desgn:"manager"},{_id:2,eno:333,skillset:["c","c++","java"]});
```

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

### 5.Show collections.

**Syntax:**

```
db.emp.find();
```

```
{ "_id" : ObjectId("644a03ef7f2a9911c38d9768"), "eno" : 111, "ename" : "abc", "esal" : 234.45 }
```

Show collection in well organized format

```
db.emp.find().pretty();
```

```
{
  "_id" : ObjectId("644a03ef7f2a9911c38d9768"),
  "eno" : 111,
  "ename" : "abc",
  "esal" : 234.45
}
```

### 6.Inserting records into collection emp.

```
db.emp.insert({eno:222,ename:"cde",desgn:"manager",esal:223.67});
```

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

```
> db.emp.insert({eno:222,ename:"cde",desgn:"manager",esal:223.67});
```

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

```
> db.emp.find();
```

```
{ "_id" : ObjectId("644a03ef7f2a9911c38d9768"), "eno" : 111, "ename" : "abc", "esal" : 234.45 }
```

```
{ "_id" : ObjectId("644a04927f2a9911c38d9769"), "eno" : 222, "ename" : "cde", "desgn" : "manager", "esal" : 223.67 }
```

```
{ "_id" : ObjectId("644a049f7f2a9911c38d976a"), "eno" : 222, "ename" : "cde", "desgn" : "manager", "esal" : 223.67 }
```

```
> db.emp.find().pretty();
```

```
{
  "_id" : ObjectId("644a03ef7f2a9911c38d9768"),
  "eno" : 111,
  "ename" : "abc",
  "esal" : 234.45
}
```

```
{
  "_id" : ObjectId("644a04927f2a9911c38d9769"),
  "eno" : 222,
  "ename" : "cde",
  "desgn" : "manager",
  "esal" : 223.67
}
```

```

}
{
  "_id" : ObjectId("644a049f7f2a9911c38d976a"),
  "eno" : 222,
  "ename" : "cde",
  "desgn" : "manager",
  "esal" : 223.67
}

```

```

db.emp.insert({eno:223,ename:"aaa",desgn:"manager"},{_id:2,eno:333,skillset:["c","c++","java"]});
WriteResult({ "nInserted" : 1 })

```

### **7.show records including ename,esal.**

```

> db.emp.find({eno:111},{ename:1,esal:1});
{ "_id" : ObjectId("644a03ef7f2a9911c38d9768"), "ename" : "abc", "esal" : 234.45 }

```

```

db.emp.find().pretty();
{
  "_id" : ObjectId("644a03ef7f2a9911c38d9768"),
  "eno" : 111,
  "ename" : "abc",
  "esal" : 234.45
}

```

### **8.Show records excluding designation**

```

{ "_id" : ObjectId("644a06117f2a9911c38d976b"), "eno" : 223, "ename" : "aaa", "desgn" : "manager" }
> db.emp.find({eno:223},{desgn:0}).pretty();
{
  "_id" : ObjectId("644a06117f2a9911c38d976b"),
  "eno" : 223,
  "ename" : "aaa"
}

```

### **9. Remove records**

```

db.emp.remove({eno:223});
WriteResult({ "nRemoved" : 1 })

```