

## Task-10 : CRUD Operations In Document Databases

Date : 14/10/25

Aim : To Perform Mongoose using NPM design on MongoDB designing document database and performing CRUD operations like creating, inserting, querying, finding and removing operations.

### Steps :

Step-1 : Install Mongodb using following link.

<https://www.mongodb.com/try/download/community>.

Step-2 : Install Mongoose using the below link.

<https://www.mongodb.com/docs/mongodb-shell/#download-and-install-mongoose>.

Step-3 : To add the MongoDB shell binary's location to your PATH environment variable:

open the Control Panel.

In the system and security category, click system. click Advanced system settings. The system Properties modal displays.

click Environmental variables.

In the system Variables section, select path and click Edit. The Edit environment variable modal displays.

click New and add the filepath to your mongoose binary.

click OK to confirm your changes. On each other modal, click OK to confirm your changes.

To confirm that your PATH environment variable is correctly configured to find mongoose, open a command prompt and enter the mongoose - help command.

If your PATH is configured correctly, a list of valid commands displays.



Step-4: Open mongo shell 4.0 from.

C:\Program Files\mongo DB\server\bin\mongod.exe.

Step-5: Type the CRUD (CREATE READ UPDATE DELETE) COMMANDS GIVEN IN TEXT FILE.

CRUD OPERATIONS.

db.createCollection("mylab")

{ "ok": 1 }

>

db.mylab.insertOne({ item: "Canvas", qty: 100, tags: ["cotton"], size: { h: 28, w: 35.5, uom: "cm" } })

{

"acknowledged": true,

"insertedId": ObjectId("627d13acc73990c074e6397c")

}

> db.mylab.find({ item: "Canvas" })

{ "\_id": ObjectId("627d13acc73990c074e6397c"), "item":

"Canvas", "qty": 100, "tags": ["cotton"], "size": { "h": 28, "w": 35.5, "uom": "cm" } }

>

db.mylab.insertMany([ { item: "Journal", qty: 25, tags: ["blank", "red"], size: { h: 14, w: 21, uom: "cm" } }, { item: "mat", qty: 85, tags: ["gray"], size: { h: 27.9, w: 35.5, uom: "cm" } }, { item: "mouse pad", qty: 25, tags: ["gel", "blue"], size: { h: 19, w: 22.85, uom: "cm" } } ] )

{

"acknowledged": true,

"insertedIds": [

ObjectId("627d1598c73990c074e6397d"),

ObjectId("627d1598c73990c074e6397e"),

ObjectId("627d1598c73990c074e6397f") ]



}

```
> db.mylab.find({item:1,qty:13}).
```

```
{ "_id" : ObjectId("627d13acc73990c074e6397c"), "item" :
```

```
"canvas", "qty" : 100 }
```

```
{ "_id" : ObjectId("627d1598c73990c074e6397d"), "item" :
```

```
"journal", "qty" : 25 }
```

```
{ "_id" : ObjectId("627d1598c73990c074e6397e"), "item" :
```

```
"mat", "qty" : 85 }
```

```
{ "_id" : ObjectId("627d1598c73990c074e6397f"), "item" :
```

```
"mousepad", "qty" : 25 }
```

```
> db.mylab.find({item:1,qty:13}).pretty().
```

```
{
```

```
  "_id" : ObjectId("627d13acc73990c074e6397c"),
```

```
  "item" : "canvas",
```

```
  "qty" : 100.
```

```
}
```

```
{
```

```
  "_id" : ObjectId("627d1598c73990c074e6397d"),
```

```
  "item" : "journal",
```

```
  "qty" : 25.
```

```
}
```

```
{ "_id" : ObjectId("627d1598c73990c074e6397e"), "item" : "mat",
```

```
  "qty" : 85 }
```

```
{
```

```
  "_id" : ObjectId("627d1598c73990c074e6397f"),
```

```
  "item" : "mousepad",
```

```
  "qty" : 25.
```

```
}
```

```
> db.mylab.find({item:"canvas"}, pretty()).sort({item:-1})
```

```
{
```



```

    "_id" : ObjectId("627d139acc73990c074e6397c"),
    "item" : "canvas",
    "qty" : 100,
    "tag" : [
      "cotton" ],
    "size" : {
      "h" : 28,
      "w" : 35.5,
      "uom" : "cm"
    }
  }

```

3

```

> db.mylab.deleteOne({ item: "journal" }).

```

=

```

> db.mylab.find({ _id: ObjectId("627d139acc73990c074e6397c"),

```

```

  {

```

```

    "_id" : ObjectId("627d139acc73990c074e6397c"),

```

```

    "item" : "canvas",

```

```

    "qty" : 100
  }

```

```

  }

```

```

  {

```

```

    "_id" : ObjectId("627d1598c73990c074e6397d"),

```

```

    "item" : "journal",

```

```

    "qty" : 25
  }

```

```

  }

```

```

  { "_id" : ObjectId("627d1598c73990c074e6397e"), "item" : "mat",

```

```

    "qty" : 85 }

```

```

  {

```

```

    "_id" : ObjectId("627d1598c73990c074e6397f"), "item" :

```

```

    "mousepad", "qty" : 25 }

```

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EX NO.	
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	4
RECORD (4)	4
TOTAL (15)	18
SIGN WITH DATE	

Result: Thus the Implementation of CRUD operations like creating, inserting, finding and removing operations using MongoDB is successfully executed.