

Task: 10 CRUD Operations in document database.
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 Mongo db using following link.

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

Step 2: Install Mongoose using the below link.

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

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

open the control panel.
Click advanced System Settings. The System Properties modal displays.

click environmental variables.

In the System Variable 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.

Step 1: Open mongo shell 4.0 from c:\ProgramFiles\mongoDB\server\bin\mongo.exe

Steps: 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("627d13ace73996c074e6397e")
```

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

```
{ "_id": ObjectId("627d13acc73700c074e6397c"), "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: "mousepad", qty: 25, tags: ["gel", "blue"], size: { h: 19, w: 22.85, uom: "cm" } } ])
```

```
{
```

```
  "acknowledged": true,
```

```
  "insertedIds": [
    ObjectId("627d1598c73996c074e6397d"),
    ObjectId("627d1598c73996c074e6397e"),
    ObjectId("627d1598c73996c074e6397f")
  ]
```

3
> db.mylab.find({item: 1, qty: 12})

```
{ "_id": ObjectId("627d13acc73990c674e6377c"), "item":
```

```
"Canvas", "qty": 100,
```

```
{ "_id": ObjectId("627d1598c73990c074e6377d"), "item":
```

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

```
{ "_id": ObjectId("627d1598c73990c074e6377e"), "item":
```

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

```
{ "_id": ObjectId("627d1598c73990c074e6377f"), "item":
```

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

```
> db.mylab.find({item: 1, qty: 12}).pretty()
```

```
{
```

```
  "_id": ObjectId("627d13acc73990c074e6377c"),
```

```
  "item": "Canvas",
```

```
  "qty": 100
```

```
}
```

```
{
```

```
  "_id": ObjectId("627d1598c73990c074e6377e"), "item":
```

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

```
{
```

```
  "_id": ObjectId("627d1598c73990c074e6377f"),
```

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

```
  "qty": 25
```

```
}
```

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

```
{
```

```
  "_id": ObjectId("627d13acc73990c074e6377c"),
```

```
  "item": "Canvas",
```

```
  "qty": 100
```

```
  "tags": []
```



```

"color": "black",
    "size": {
        "h": 28,
        "w": 35.5,
        "unit": "cm"
    }
}
> db.mylab.deleteOne({item: "journal"})
:::
> db.mylab.find({item: 1, qty: 1}) pretty()
{
  "_id": ObjectId("627d130c73990c074e6397d"),
  "item": "Canvas",
  "qty": 100
}
{
  "_id": ObjectId("627d1598c73990c074e6397d"),
  "item": "journal",
  "qty": 25
}
{
  "_id": ObjectId("627d1598c73990c074e6397d"),
  "mat": "journal",
  "qty": 85
}

```

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EX NO.	
PERFORMANCE (5)	10
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
SIGN WITH DATE	17/06/2023

Result: The implementation of CRUD operations (Creating, inserting, finding and removing operations) using MongoDB is successfully executed.

7/4/23