Task No:-10 Date:-14/10/25	CRUD operations in Document Databases.

Aim:- To perform mongoose using NPM design on MongoDB designing document database and performing CRUD operations like Creating, inserting, quering, finding and removing operations.

Steps:

Step1: install mongo db using following link.

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

step2: install mongosh using the belaa link.

https://www.mongodb.com/docs/mongodb-shell/#download-and-install-mongosh

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 sy settings. the System properties modal displays

click Environment 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 mongosh binary

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

To confirm that your prob. PATH environment Variable is correctly configured to find mongosh, open a command prompt and enter the mongosh --help Command.

If your PATH is configured correctly, a list of Valid Commands displays.

step 4 : open mongo shell 4.0 from c:\programfiles\mongoDB\server\bin\mongod.exe.

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

CRUD OPERATIONS:

```
db.create collection("mylab")
{"OK":1}
>db.mylab.insertOne({item:"canvas", qty:100, tags:
["cotton"], size:{h:28, W:85.5, 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.
"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("627d1598c73990c074e6397d"),
                objectId("627d1598c73990c074e6397e"),
                objectId("627d1598c73990c074e6397f")
              ]
}
>db.mylab.find({},{item:1, qty:1})
{"_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:1}).pretty()
{
"_id": ObjectId("627d13acc73990c074e6397c"),
"item": "Canvas",
"qty": 100
}
{ "_id": ObjectId("627d13acc73990c074e6397d"),
"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("627d13acc73990c074e6397c"),
"item": "Canvas", "qty": 100, "tags": ["cotton"],
"size": { "h": 28, "w": 35.5, "uom": "cm" }
}
>db.mylab.deleteOne({item:"journal"}
...
...
>db.mylab.find({}, {item:1, qty:1}).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 }
```

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EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15

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