**TASK 8**: **CRUD operations in Document databases** **CO3, S3**

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

**STEPS:**
Step 1)install Mongo db using following link
https://www.mongodb.com/try/download/community
Step 2)install Mongosh using the below 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 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 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.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:"
```

```
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("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("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
}
>

**Result:**
Thus CRUD using NPM design on MongoDB designing document database and performing CRUD operations like creating, inserting, querying, finding, removing operations are performed.