

## Task 9

### CRUD Operations in Document Databases:

Aim: To perform mongoose using NPM designs on MongoDB designing document database and performing CRUD operations like creating, inserting, querying, finding, removing operations.

Steps :

1) Install Mongodb using following link

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

2) Install mongosh

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.

click environment variables.

In the system variables section, select path and click edit.

click new and add the filepath to your mongosh binary.

click OK to confirm your changes.

To confirm that your path environment variable is correctly configured to find mongosh.

4) Open mongo shell 4.0 from C:\programfiles\mongodb\server\bin

mongod.exe.

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

CRUD OPERATIONS :

```
db.createCollection("mylab3")
{"ok":1}
>
db.mylab3.find({item:"canvas"})
{ "_id " : ObjectId("627d13acc73990c074e6397c"), "item" : "canvas", "qty" :
100, "tags" : ["cotton"], "size" : { "h" : 28, "w" : 35.5, "uom" : "cm" } }
>
db.mylab3.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("627d1d598c73990c074e6397d"),
    ObjectId("627d1598c73990c074e6397e"),
    ObjectId("627d1598c73990c74e6397f") ]
}
```

```
> db.mylab3.find({},{item:1,qty:1}).pretty()
{
  "_id": ObjectId("627d13acc73990c074e6397c"),
  "item": "canvas",
  "qty": 100
}
{
  "_id": ObjectId("627d1598c73990c074e6397e"),
  "item": "mat",
  "qty": 185
}
{
  "_id": ObjectId("627d1598c73990c074e6397f"),
  "item": "mousepad",
  "qty": 25
}
> db.mylab3.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.myLab3.deleteOne({item:"journal"}).  
...  
>db.myLab3.find({},{item:1,qty:1}).pretty()  
{  
  "_id" : ObjectId("627d13acc73990c074e6397c"),  
  "item" : "canvas",  
  "qty" : 100  
}  
{  
  "_id" : ObjectId("627d13acc73990c074e6397c"),  
  "item" : "journal",  
  "qty" : 25  
}  
{  
  "_id" : ObjectId("627d13acc73990c074e6397c"),  
  "item" : "mat",  
  "qty" : 85  
}  
{  
  "item" : "mousepad",  
  "qty" : 25  
}  
>  
1
```

Result: Thus the CRUD using NPM design on MongoDB designing document database and performing operations are performed.