

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



School of Computing

B.Tech. - Computer Science and Engineering

VTR UGE2021 - (CBCS)



Academic Year: 2025-2026

SUMMER SEMESTER - SS2526

Course Code : 10211CS207

Course Name : Database Management Systems

Slot No : S1 L4

DBMS TASK - 8 REPORT

Title: CRUD operations in Document databases

Submitted by:

VTU NO	REGISTER NUMBER	STUDENT NAME
VTU28953	24UECS0493	CH. KISHORE

TASK 8

CRUD operations in Document databases

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:

3.1 Open the Control Panel.

3.2 In the System and Security category, click System.

3.3 Click Advanced system settings. The System Properties modal displays.

3.4 Click Environment Variables.

3.5 In the System variables section, select path and click Edit. The Edit environment variable modal displays.

3.6 Click New and add the filepath to your mongosh binary.

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

Step 4: 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 5: Open mongo shell 4.0 from c:\programfiles\mongoDB\server\bin\mongod.exe

Step 6: Type the CRUD(CREATE READ UPDATE DELETE) COMMANDS GIVEN IN

TEXT FILE.

CRUD OPERATIONS:

```
db.createCollection("CricketBoard")
{ "ok" : 1 }

> db.CricketBoard.insertOne({BoardID: "B1001", Name:"Chennai Cricket Board",
Address:"Chennai",Phone:9988776699});

{
  "acknowledged" : true,
  "insertedId" : ObjectId("b51cf172bebbfe7993adf909")
}
db.mylab.find({BoardID:"B1001"})
{ "_id" : ObjectId("b51cf172bebbfe7993adf909"), "BoardID" : "B1001", "Name" : "Chennai
Cricket Board", "Address" : "Chennai", "Phone" : 9988776699 }

db.CricketBoard.insertMany([{BoardID:"B1002",Name:"Tiruvallur Cricket
Board",Address:"Chennai",Phone:9977886699},{BoardID:"B1003",Name:"Viluppuram Cricket
Board",Address:"Viluppuram",Phone:9966886699},{BoardID:"B1004",Name:"Trichy Cricket
Board",Address:"Trichy",Phone:9955886699},{BoardID:"B1005",Name:"Madurai Cricket
Board",Address:"Madurai",Phone:9944886699}]);

{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("b51ceee3bebbfe7993adf904"),
    ObjectId("b51ceee3bebbfe7993adf905"),
    ObjectId("b51ceee3bebbfe7993adf906"),
    ObjectId("b51ceee3bebbfe7993adf907")
  ]
}

db.CricketBoard.find()
{ "_id" : ObjectId("b51ceee3bebbfe7993adf904"), "BoardID" : "B1002", "Name" : "Tiruvallur
```

```

    "Cricket Board", "Address" : "Chennai", "Phone" : 9977886699 }

{ "_id" : ObjectId("b51ceee3bebbfe7993adf905"), "BoardID" : "BID03", "Name" : "Viluppuram
Cricket Board", "Address" : "Viluppuram", "Phone" : 9966886699 }

{ "_id" : ObjectId("b51ceee3bebbfe7993adf906"), "BoardID" : "BID04", "Name" : "Trichy
Cricket Board", "Address" : "Trichy", "Phone" : 9955886699 }

{ "_id" : ObjectId("b51ceee3bebbfe7993adf907"), "BoardID" : "BID05", "Name" : "Madurai
Cricket Board", "Address" : "Madurai", "Phone" : 9944886699 }

{ "_id" : ObjectId("b51cf172bebbfe7993adf909"), "BoardID" : "BID01", "Name" : "Chennai
Cricket Board", "Address" : "Chennai", "Phone" : 9988776699 }

```

```

db.CricketBoard.find().pretty()
{
    "_id" : ObjectId("b51ceee3bebbfe7993adf904"),
    "BoardID" : "BID02",
    "Name" : "Tiruvallur Cricket Board",
    "Address" : "Chennai",
    "Phone" : 9977886699
}
{
    "_id" : ObjectId("b51ceee3bebbfe7993adf905"),
    "BoardID" : "BID03",
    "Name" : "Viluppuram Cricket Board",
    "Address" : "Viluppuram",
    "Phone" : 9966886699
}
{
    "_id" : ObjectId("b51ceee3bebbfe7993adf906"),
    "BoardID" : "BID04",
    "Name" : "Trichy Cricket Board",
    "Address" : "Trichy",
    "Phone" : 9955886699
}
{
    "_id" : ObjectId("b51ceee3bebbfe7993adf907"),
    "BoardID" : "BID05",
    "Name" : "Madurai Cricket Board",
    "Address" : "Madurai",

```

```

    "Phone" : 9944886699
}
{
    "_id" : ObjectId("651cf172bebbfe7993adf909"),
    "BoardID" : "B1D01",
    "Name" : "Chennai Cricket Board",
    "Address" : "Chennai",
    "Phone" : 9988776699
}

db.CricketBoard.deleteOne({BoardID:"B1D03"})
{
    "acknowledged" : true,
    "deletedCount" : 1
}

db.CricketBoard.find().pretty()
{
    "_id" : ObjectId("651ceee3bebbfe7993adf904"),
    "BoardID" : "B1D02",
    "Name" : "Tiruvallur Cricket Board",
    "Address" : "Chennai",
    "Phone" : 9977886699
}

{
    "_id" : ObjectId("651ceee3bebbfe7993adf906"),
    "BoardID" : "B1D04",
    "Name" : "Trichy Cricket Board",
    "Address" : "Trichy",
    "Phone" : 9955886699
}

{
    "_id" : ObjectId("651ceee3bebbfe7993adf907"),

```

```
"BoardID" : "B1005",
  "Name" : "Madurai Cricket Board",
  "Address" : "Madurai",
  "Phone" : 9944886699
}

{
  "_id" : ObjectId("651cf172bebbfe7993adf909"),
  "BoardID" : "B1001",
  "Name" : "Chennai Cricket Board",
  "Address" : "Chennai",
  "Phone" : 9988776699
}
```

Result:

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