**PAPER – II                 PRACTICAL NO. : 06**

**AIM** : **DEMONSTRATE THE ACCESSING AND STORING AND PERFORMING CRUD OPERATIONS IN**

1. **MongoDB**
2. **Redis**

**ROLL NO. : 02                                BATCH : M.SC PART-I**

**DATE :   /  /22**

**CODE :**

**View all databases :**

> show dbs

admin   0.000GB

config  0.000GB

local   0.000GB

**Create a new or switch databases :**

> use msc

switched to db msc

> use comments

switched to db comments

**View current Database :**

> db

Comments

**Delete Database ‘comments’:**

> db.dropDatabase()

{ "ok" : 1 }

> db

Msc

**Create a collection :**

> db.createCollection('info')

{ "ok" : 1 }

> db.createCollection('practical')

{ "ok" : 1 }

**Show Collections :**

> show collections

Info

Practical

**Drop a collection named ‘practical’ :**

>db.practical.drop()

> show collections

Info

> use mcs

switched to db msc

**Insert One Row :**

> db.practical.insert({ 'name': 'Zeba',

... 'lang': 'Julia',

... 'member-since': 5 })

WriteResult({ "nInserted" : 1 })

>

**Insert many Rows :**

> db.info.insertMany([{ 'name': 'Omkar', 'lang': 'Java', 'member-since': 4}, {'name':Sarika, 'lang': 'Python', 'member-since': 6 }, { 'name': 'Fiza', 'lang': 'Java', 'member-since': 3},])

{

        "acknowledged" : true,

        "insertedIds" : [

                ObjectId("62fded19ac358c959599095a"),

                ObjectId("62fded19ac358c959599095b"),

ObjectId("62fded19ac358c959599095d")

        ]

}

**Show all Rows in a Collection :**

> db.info.find()

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 5 }

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "lang" : "Java", "member-since" : 4 }

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 6 }

{ "\_id" : ObjectId("62fded19ac358c959599095d"), "name" : "Fiza", "lang" : "Java", "member-since" : 3 }

>

**Find the first row matching the object :**

>db.comments.findOne({name: Zeba})

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 5 }

**Search in a MongoDB Database :**

>db.comments.find({lang:'Python'})

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 6 }

**Limit the number of rows in output :**

>db.comments.find().limit(2)

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 5 }

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "lang" : "Java", "member-since" : 4 }

**Count the number of rows in the output :**

>db.comments.find().count()

2

**Update a row :**

>db.comments.updateOne({name: Zeba},

{$set: {'name':Zeba,

'lang': 'Julia',

'member\_since': 7

}}, {upsert: true})

WriteResult({“nMatched” : 1, “nUpserted” : 1, “nModified” : 1 })

>db.comments.findOne({name: Zeba})

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 7 }

**MongoDB Increment Operator :**

>db.comments.update({name: 'Sarika'},

{$inc:{

member\_since: 2

}})

>db.comments.findOne({name: Sarika})

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 8 }

**MongoDB Rename Operator :**

>db.comments.update({name: 'Omkar'},

{$rename:{

lang: 'language'

}})

>db.comments.findOne({name: Omkar})

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "language" : "Java", "member-since" : 4 }

**Delete Row :**

>db.comments.remove({name: 'Fiza'})

WriteResult({“nRemoved” : 1 })

> db.info.find()

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 7 }

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "lang" : "Java", "member-since" : 4 }

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 8 }

**Less than/Greater than/ Less than or Equal/Greater than or Equal :**

>db.comments.find({member\_since: {$lt: 7}})

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "lang" : "Java", "member-since" : 4 }

>db.comments.find({member\_since: {$lte: 7}})

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 7 }

{ "\_id" : ObjectId("62fded19ac358c959599095a"), "name" : "Omkar", "lang" : "Java", "member-since" : 4 }

>db.comments.find({member\_since: {$gt: 7}})

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 8 }

>db.comments.find({member\_since: {$gte: 7}})

{ "\_id" : ObjectId("62fded57ac358c959599095c"), "name" : "Zeba", "lang" : "Julia", "member-since" : 7 }

{ "\_id" : ObjectId("62fded19ac358c959599095b"), "name" : "Sarika", "lang" : "Python", "member-since" : 8 }