**Database Technologies (DT) Practical**

**MongoDB Questions**

Solve the following database using MongoDB :

1. Create a database with name ‘Company’.

> use Company1

switched to db Company1

Q:An ‘Employee’ is a collection of documents with the following

Fields :

a. Employee ID

b. First Name

c. Last Name

d. Email

e. PhoneNo.

f. Address

h. Designation

i. Experience

j. Date of Joining

k. Birthdate

>show collections

Employee

db.createCollection("Employee")

db.Employee.createIndex({"eid":1},{unique:true})

> db.Employee.insertOne({eid:101,fname:"Aasha",lname:"Roy",email:"aasha.roy@gmail.com",phone:0208464936,addrs:"Pune",salary:"20000",des:"Admin",Exp:3,doj:"2022-06-01",dob:"1989-24-08"})

> db.Employee.find()

{ "\_id" : ObjectId("6381a1e83889afe1fbfd0295"), "eid" : 101, "fname" : "Aasha", "lname" : "Roy", "email" : "aasha.roy@gmail.com", "phone" : 2024378956, "addrs" : "Pune", "salary" : 20000, "desg" : "Admin", "Exp" : 3, "doj" : "2022-06-01", "dob" : "1989-24-08" }

{ "\_id" : ObjectId("6381a1fc3889afe1fbfd0296"), "eid" : 102, "fname" : "Pritee", "lname" : "Roy", "Email" : "Pritee.123@gmail.com", "Phone" : 9822151654, "addrs" : "Bombay", "salary" : 18000, "desg" : "Supervisor", "exp" : 2, "doj" : "2020-07-01", "dob" : "1996-08-21" }

{ "\_id" : ObjectId("6381a2053889afe1fbfd0297"), "eid" : 103, "fname" : "Mina", "lname" : "Sharma", "Email" : "mina.sharma@gmail.com", "Phone" : 9011568975, "addrs" : "Pune", "salary" : 21500, "desg" : "Clerk", "exp" : 7, "doj" : "2017-06-01", "dob" : "1987-03-22" }

{ "\_id" : ObjectId("6381a20e3889afe1fbfd0298"), "eid" : 104, "fname" : "Geeta", "lname" : "Patil", "Email" : "geeta\_patil@yahoo.com", "Phone" : 7856452598, "addrs" : "Pune", "salary" : 23000, "desg" : "Admin", "exp" : 8, "doj" : "2018-06-15", "dob" : "1990-02-28" }

> db.Employee.find().pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Pune",

"salary" : 20000,

"desg" : "Admin",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 18000,

"desg" : "Supervisor",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

{

"\_id" : ObjectId("6381a2053889afe1fbfd0297"),

"eid" : 103,

"fname" : "Mina",

"lname" : "Sharma",

"Email" : "mina.sharma@gmail.com",

"Phone" : 9011568975,

"addrs" : "Pune",

"salary" : 21500,

"desg" : "Clerk",

"exp" : 7,

"doj" : "2017-06-01",

"dob" : "1987-03-22"

}

{

"\_id" : ObjectId("6381a20e3889afe1fbfd0298"),

"eid" : 104,

"fname" : "Geeta",

"lname" : "Patil",

"Email" : "geeta\_patil@yahoo.com",

"Phone" : 7856452598,

"addrs" : "Pune",

"salary" : 23000,

"desg" : "Admin",

"exp" : 8,

"doj" : "2018-06-15",

"dob" : "1990-02-28"

}

Q:A ‘Transaction’ is a collection of documents with the following

fields:

a. Transaction Id,

b. Transaction Date

c. Name

d. Transaction Details

e. Payment

f. Remark

> db.createCollection('Transaction')

> db.Transaction.createIndex({"tid":1},{unique:true})

>db.Transaction.insertOne({tid:1,tdate:"2021-05-21",tname:"T1",tdetails:"Grocery",payment:"2500",remarks:"done",eid:db.Employee.find()[1].\_id})

> db.Transaction.find().pretty()

{

"\_id" : ObjectId("6381a3ca3889afe1fbfd029d"),

"tid" : 1,

"tdate" : "2021-05-21",

"name" : "T1",

"tdetails" : "Grocery",

"payment" : 2500,

"remark" : "done",

"eid" : 101

}

{

"\_id" : ObjectId("6381a3fd3889afe1fbfd029e"),

"tid" : 2,

"tdate" : "2021-05-21",

"name" : "T2",

"tdetails" : "Snacks",

"payment" : 2280,

"remark" : "incomplete",

"eid" : 102

}

{

"\_id" : ObjectId("6381a41a3889afe1fbfd029f"),

"tid" : 3,

"tdate" : "2021-06-25",

"name" : "T3",

"tdetails" : "Sweets",

"payment" : 2690,

"remark" : "complete",

"eid" : 103

}

{

"\_id" : ObjectId("6381a43d3889afe1fbfd02a0"),

"tid" : 4,

"tdate" : "2021-07-23",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 104

}

{

"\_id" : ObjectId("6381a45a3889afe1fbfd02a1"),

"tid" : 5,

"tdate" : "2021-08-25",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 103

}

Q:Solve the Following Queries:

1. Update designation of an employee having Employee id as\_\_\_\_\_\_\_.

> db.Employee.updateOne({eid:101},{$set:{"desg":"Staff"}})

{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }

> db.Employee.find().pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Pune",

"salary" : 20000,

"desg" : "Staff",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

2. Update the designation of an employee named “\_\_\_\_\_\_\_ “ from supervisor to manager

> db.Employee.updateOne({fname:'Pritee'},{$set:{"desg":"Manager"}})

{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 18000,

"desg" : "Manager",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

3. Delete the transaction made by “\_\_\_\_\_\_\_” employee on the given date.

> db.Transaction.deleteOne({eid:103,tdate:"2021-06-25"})

{ "acknowledged" : true, "deletedCount" : 1 }

> db.Transactions.find().pretty()

> db.Transaction.find().pretty()

{

"\_id" : ObjectId("6381a3ca3889afe1fbfd029d"),

"tid" : 1,

"tdate" : "2021-05-21",

"name" : "T1",

"tdetails" : "Grocery",

"payment" : 2500,

"remark" : "done",

"eid" : 101

}

{

"\_id" : ObjectId("6381a3fd3889afe1fbfd029e"),

"tid" : 2,

"tdate" : "2021-05-21",

"name" : "T2",

"tdetails" : "Snacks",

"payment" : 2280,

"remark" : "incomplete",

"eid" : 102

}

{

"\_id" : ObjectId("6381a43d3889afe1fbfd02a0"),

"tid" : 4,

"tdate" : "2021-07-23",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 104

}

{

"\_id" : ObjectId("6381a45a3889afe1fbfd02a1"),

"tid" : 5,

"tdate" : "2021-08-25",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 103

}

4. Change the address of an employee having Employee id as \_\_\_\_\_\_\_.

> db.Employee.update({eid:101},{$set:{addrs:'Mumbai'}})

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

> db.Employee.find().pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Mumbai",

"salary" : 20000,

"desg" : "Staff",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 18000,

"desg" : "Manager",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

{

"\_id" : ObjectId("6381a2053889afe1fbfd0297"),

"eid" : 103,

"fname" : "Mina",

"lname" : "Sharma",

"Email" : "mina.sharma@gmail.com",

"Phone" : 9011568975,

"addrs" : "Pune",

"salary" : 21500,

"desg" : "Clerk",

"exp" : 7,

"doj" : "2017-06-01",

"dob" : "1987-03-22"

}

{

"\_id" : ObjectId("6381a20e3889afe1fbfd0298"),

"eid" : 104,

"fname" : "Geeta",

"lname" : "Patil",

"Email" : "geeta\_patil@yahoo.com",

"Phone" : 7856452598,

"addrs" : "Pune",

"salary" : 23000,

"desg" : "Admin",

"exp" : 8,

"doj" : "2018-06-15",

"dob" : "1990-02-28"

}

5. Sort the employees in the descending order of their designation.

> db.Employee.find().sort({desg:-1}).pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Mumbai",

"salary" : 20000,

"desg" : "Staff",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 18000,

"desg" : "Manager",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

{

"\_id" : ObjectId("6381a2053889afe1fbfd0297"),

"eid" : 103,

"fname" : "Mina",

"lname" : "Sharma",

"Email" : "mina.sharma@gmail.com",

"Phone" : 9011568975,

"addrs" : "Pune",

"salary" : 21500,

"desg" : "Clerk",

"exp" : 7,

"doj" : "2017-06-01",

"dob" : "1987-03-22"

}

{

"\_id" : ObjectId("6381a20e3889afe1fbfd0298"),

"eid" : 104,

"fname" : "Geeta",

"lname" : "Patil",

"Email" : "geeta\_patil@yahoo.com",

"Phone" : 7856452598,

"addrs" : "Pune",

"salary" : 23000,

"desg" : "Admin",

"exp" : 8,

"doj" : "2018-06-15",

"dob" : "1990-02-28"

}

6. Count the total number of employees in a collection.

> db.Employee.find().count()

4

7. Display all the documents of both the collections in a formatted manner.

> db.Employee.find().pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Mumbai",

"salary" : 20000,

"desg" : "Staff",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 18000,

"desg" : "Manager",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

{

"\_id" : ObjectId("6381a2053889afe1fbfd0297"),

"eid" : 103,

"fname" : "Mina",

"lname" : "Sharma",

"Email" : "mina.sharma@gmail.com",

"Phone" : 9011568975,

"addrs" : "Pune",

"salary" : 21500,

"desg" : "Clerk",

"exp" : 7,

"doj" : "2017-06-01",

"dob" : "1987-03-22"

}

{

"\_id" : ObjectId("6381a20e3889afe1fbfd0298"),

"eid" : 104,

"fname" : "Geeta",

"lname" : "Patil",

"Email" : "geeta\_patil@yahoo.com",

"Phone" : 7856452598,

"addrs" : "Pune",

"salary" : 23000,

"desg" : "Admin",

"exp" : 8,

"doj" : "2018-06-15",

"dob" : "1990-02-28"

}

> db.Transaction.find().pretty()

{

"\_id" : ObjectId("6381a3ca3889afe1fbfd029d"),

"tid" : 1,

"tdate" : "2021-05-21",

"name" : "T1",

"tdetails" : "Grocery",

"payment" : 2500,

"remark" : "done",

"eid" : 101

}

{

"\_id" : ObjectId("6381a3fd3889afe1fbfd029e"),

"tid" : 2,

"tdate" : "2021-05-21",

"name" : "T2",

"tdetails" : "Snacks",

"payment" : 2280,

"remark" : "incomplete",

"eid" : 102

}

{

"\_id" : ObjectId("6381a43d3889afe1fbfd02a0"),

"tid" : 4,

"tdate" : "2021-07-23",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 104

}

{

"\_id" : ObjectId("6381a45a3889afe1fbfd02a1"),

"tid" : 5,

"tdate" : "2021-08-25",

"name" : "T4",

"tdetails" : "Sweets",

"payment" : 2700,

"remark" : "complete",

"eid" : 103

}

8.Update salary of all employees by giving an increment of Rs.4000.

> db.Employee.updateMany({},{$inc:{salary:4000}})

{ "acknowledged" : true, "matchedCount" : 4, "modifiedCount" : 4 }

> db.Employee.find().pretty()

{

"\_id" : ObjectId("6381a1e83889afe1fbfd0295"),

"eid" : 101,

"fname" : "Aasha",

"lname" : "Roy",

"email" : "aasha.roy@gmail.com",

"phone" : 2024378956,

"addrs" : "Mumbai",

"salary" : 24000,

"desg" : "Staff",

"Exp" : 3,

"doj" : "2022-06-01",

"dob" : "1989-24-08"

}

{

"\_id" : ObjectId("6381a1fc3889afe1fbfd0296"),

"eid" : 102,

"fname" : "Pritee",

"lname" : "Roy",

"Email" : "Pritee.123@gmail.com",

"Phone" : 9822151654,

"addrs" : "Bombay",

"salary" : 22000,

"desg" : "Manager",

"exp" : 2,

"doj" : "2020-07-01",

"dob" : "1996-08-21"

}

{

"\_id" : ObjectId("6381a2053889afe1fbfd0297"),

"eid" : 103,

"fname" : "Mina",

"lname" : "Sharma",

"Email" : "mina.sharma@gmail.com",

"Phone" : 9011568975,

"addrs" : "Pune",

"salary" : 25500,

"desg" : "Clerk",

"exp" : 7,

"doj" : "2017-06-01",

"dob" : "1987-03-22"

}

{

"\_id" : ObjectId("6381a20e3889afe1fbfd0298"),

"eid" : 104,

"fname" : "Geeta",

"lname" : "Patil",

"Email" : "geeta\_patil@yahoo.com",

"Phone" : 7856452598,

"addrs" : "Pune",

"salary" : 27000,

"desg" : "Admin",

"exp" : 8,

"doj" : "2018-06-15",

"dob" : "1990-02-28"

}

**2. Create a database with the name ‘Movie’.**

Q:A ‘Film’ is a collection of documents with the following fields:

a. Film Id

b. Title of the film

c. Year of release

d. Category / Genre (like adventure, action, sci-fi, romantic etc.) A film can belong to more than genre

e. Actors (A Film can have more than one actor)

f. Director (A Film can have more than one director)

g. Release details (Place,date,rating)

> use Movie

switched to db Movie

> db.createCollection('Film')

> db.Film.createIndex({Film\_id:1},{unique:true})

> db.Film.insert({Film\_id:1, Title:'Super Heros',Year\_of\_Release:2020,Genre:['Action','Drama'],ActorsName:['Salman Khan','Rocky Roy'],DiretorName:['Sanjay','Mr. Khan'],ReleaseDetails:[{Place:'Pune',Date:'04/15/2020',Rating:'A'}]})

WriteResult({ "nInserted" : 1 })

> db.Film.insert({Film\_id:2, Title:'ABCD',Year\_of\_Release:2020,Genre:['Action','Drama','Comedy'],ActorsName:['Sanjay Dutt','Mahima'],DiretorName:['Mahesh'],ReleaseDetails:[{Place:['Pune','Mumbai'],Date:['04/15/2020','04/16/2020'],Rating:'A+'}]})

WriteResult({ "nInserted" : 1 })

> db.Film.insert({Film\_id:3, Title:'PQRS',Year\_of\_Release:2020,Genre:['Comedy'],ActorsName:['Salim','Minal'],DiretorName:['Mahesh'],ReleaseDetails:[{Place:'Mumbai',Date:'05/18/2020',Rating:'A+'}]})

WriteResult({ "nInserted" : 1 })

> db.Film.find().pretty()

{

"\_id" : ObjectId("638ae1ac9823b40719f0bf2d"),

"Film\_id" : 1,

"Title" : "Super Heros",

"Year\_of\_Release" : 2020,

"Genre" : [

"Action",

"Drama"

],

"ActorsName" : [

"Salman Khan",

"Rocky Roy"

],

"DiretorName" : [

"Sanjay",

"Mr. Khan"

],

"ReleaseDetails" : [

{

"Place" : "Pune",

"Date" : "04/15/2020",

"Rating" : "A"

}

]

}

{

"\_id" : ObjectId("638ae1f89823b40719f0bf2e"),

"Film\_id" : 2,

"Title" : "ABCD",

"Year\_of\_Release" : 2020,

"Genre" : [

"Action",

"Drama",

"Comedy"

],

"ActorsName" : [

"Sanjay Dutt",

"Mahima"

],

"DiretorName" : [

"Mahesh"

],

"ReleaseDetails" : [

{

"Place" : [

"Pune",

"Mumbai"

],

"Date" : [

"04/15/2020",

"04/16/2020"

],

"Rating" : "A+"

}

]

}

{

"\_id" : ObjectId("638ae2189823b40719f0bf2f"),

"Film\_id" : 3,

"Title" : "PQRS",

"Year\_of\_Release" : 2020,

"Genre" : [

"Comedy"

],

"ActorsName" : [

"Salim",

"Minal"

],

"DiretorName" : [

"Mahesh"

],

"ReleaseDetails" : [

{

"Place" : "Mumbai",

"Date" : "05/18/2020",

"Rating" : "A+"

}

]

}

Q:An ‘Actor’ is a collection of documents with the following fields: a. Actor Id

b. Name

d. Address

e. Contact Details

f. Age of an actor.

> db.createCollection('Actor')

{

"ok" : 0,

"errmsg" : "Collection already exists. NS: movie.Actor",

"code" : 48,

"codeName" : "NamespaceExists"

}

> db.Actor.createIndex({'Actor\_id':1},{unique:true})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

> db.Actor.insert({Actor\_id:"A103",ActorName:"Amir Khan",Address:"Mumbai",ContactNo:"9164975450",Age:45})

WriteResult({ "nInserted" : 1 })

> db.Actor.find().pretty()

{

"\_id" : ObjectId("638ae2f79823b40719f0bf30"),

"Actor\_id" : "A101",

"ActorName" : "Akshay",

"Address" : "Mumbai",

"ContactNo" : "9256897540",

"Age" : 23

}

{

"\_id" : ObjectId("638ae3009823b40719f0bf31"),

"Actor\_id" : "A102",

"ActorName" : "Salman Khan",

"Address" : "Pune",

"ContactNo" : "9568975410",

"Age" : 55

}

{

"\_id" : ObjectId("638ae3179823b40719f0bf34"),

"Actor\_id" : "A103",

"ActorName" : "Amir Khan",

"Address" : "Mumbai",

"ContactNo" : "9164975450",

"Age" : 45

}

**Solve the Following Queries:**

**1. Delete an actor named “Salman Khan ".**

> db.Actor.deleteOne({ActorName:'Salman Khan'})

{ "acknowledged" : true, "deletedCount" : 1 }

> db.Actor.find().pretty()

{

"\_id" : ObjectId("638ae2f79823b40719f0bf30"),

"Actor\_id" : "A101",

"ActorName" : "Akshay",

"Address" : "Mumbai",

"ContactNo" : "9256897540",

"Age" : 23

}

{

"\_id" : ObjectId("638ae3179823b40719f0bf34"),

"Actor\_id" : "A103",

"ActorName" : "Amir Khan",

"Address" : "Mumbai",

"ContactNo" : "9164975450",

"Age" : 45

}

**2. Delete all actors from an ‘Actor’ collection who have age greater than “ 25 ”**

> db.Actor.remove({Age:{$gt:25}})

WriteResult({ "nRemoved" : 1 })

> db.Actor.find().pretty()

{

"\_id" : ObjectId("638ae2f79823b40719f0bf30"),

"Actor\_id" : "A101",

"ActorName" : "Akshay",

"Address" : "Mumbai",

"ContactNo" : "9256897540",

"Age" : 23

}

**3. Update the actor’s address where Actor Id is “A102”.**

> db.Actor.updateOne({Actor\_id:'A102'},{$set:{Address:'Bombay'}})

{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }

> db.Actor.find().pretty()

{

"\_id" : ObjectId("638ae2f79823b40719f0bf30"),

"Actor\_id" : "A101",

"ActorName" : "Akshay",

"Address" : "Mumbai",

"ContactNo" : "9256897540",

"Age" : 23

}

{

"\_id" : ObjectId("638ae3009823b40719f0bf31"),

"Actor\_id" : "A102",

"ActorName" : "Salman Khan",

"Address" : "Bombay",

"ContactNo" : "9568975410",

"Age" : 55

}

{

"\_id" : ObjectId("638ae3179823b40719f0bf34"),

"Actor\_id" : "A103",

"ActorName" : "Amir Khan",

"Address" : "Mumbai",

"ContactNo" : "9164975450",

"Age" : 45

}

**4. Insert at least one document with film belonging to two genres**

> db.Film.find({$and:[{Title:{$regex:/^A/}},{Year\_of\_Release:2020}]}).pretty()

{

"\_id" : ObjectId("638ae1f89823b40719f0bf2e"),

"Film\_id" : 2,

"Title" : "ABCD",

"Year\_of\_Release" : 2020,

"Genre" : [

"Action",

"Drama",

],

"ActorsName" : [

"Sanjay Dutt",

"Mahima"

],

"DiretorName" : [

"Mahesh"

],

"ReleaseDetails" : [

{

"Place" : [

"Pune",

"Mumbai"

],

"Date" : [

"04/15/2020",

"04/16/2020"

],

"Rating" : "A+"

}

]

}

**5. Insert at least one document with film belonging to three genres.**

> db.Film.find({$and:[{Title:{$regex:/^A/}},{Year\_of\_Release:2020}]}).pretty()

{

"\_id" : ObjectId("638ae1f89823b40719f0bf2e"),

"Film\_id" : 2,

"Title" : "ABCD",

"Year\_of\_Release" : 2020,

"Genre" : [

"Action",

"Drama",

"Comedy"

],

"ActorsName" : [

"Sanjay Dutt",

"Mahima"

],

"DiretorName" : [

"Mahesh"

],

"ReleaseDetails" : [

{

"Place" : [

"Pune",

"Mumbai"

],

"Date" : [

"04/15/2020",

"04/16/2020"

],

"Rating" : "A+"

}

]

}

**6. Delete an actor named "Mr. Khan ".**

> db.Actor.remove({ActorName:'Mr. Khan'})

**7. Find the titles of all the films starting with the letter ‘A’ released during the year 2019.**

> db.Movie.find({Fname:/^A/},{$and:[{Release:{$gt:'2009'}},{Release:{$lt:'2019'}}]})

{ "\_id" : ObjectId("5d7c7197244112940e51b775") }

> db.Movie.aggregate([{$group:{\_id:'$Actors',name:{$push:'$Fname'}}}]).pretty()

{

"\_id" : [

{

"Afname" : "Patrick",

"Alname" : "Louse"

}

],

"name" : [

"IT"

]

}

{

"\_id" : [

{

"Afname" : "Sharukh",

"Alname" : "Khan"

}

],

"name" : [

"DDLJ",

"Love you Zindagi"

]

}

{

"\_id" : [

{

"Afname" : [

"Akshay",

"Ritesh"

],

"Alname" : [

"Kumar",

"Deshmukh"

]

}

],

"name" : [

"Housefull"

]

}

{

"\_id" : [

{

"Afname" : "Amanda",

"Alname" : "Rush"

}

],

"name" : [

"Anabelle"

]

}

**8.Find the list of films acted by an actor "\_\_\_\_\_\_\_\_\_\_\_".**

> db.Movie.find({'Actors.Afname':'Sharukh'}).pretty()

{

"\_id" : ObjectId("5d7c72b0244112940e51b777"),

"Fid" : "2",

"Fname" : "DDLJ",

"Release" : "1999",

"Genre" : [

"Comedy",

"Romance"

],

"Actors" : [

{

"Afname" : "Sharukh",

"Alname" : "Khan"

}

],

"Director" : [

{

"Dfname" : "Karan",

"Dlname" : "Johar"

}

],

"Releasedetails" : [

{

"Place" : "Delhi",

"date" : "12/01/1999",

"rating" : "4"

}

]

}

{

"\_id" : ObjectId("5d7c76de244112940e51b779"),

"Fid" : "4",

"Fname" : "Love you Zindagi",

"Release" : "2017",

"Genre" : "Drama",

"Actors" : [

{

"Afname" : "Sharukh",

"Alname" : "Khan"

}

],

"Director" : [

{

"Dfname" : "Gauri",

"Dlname" : "Khan"

}

],

"Releasedetails" : [

{

"Place" : "Delhi",

"date" : "15/05/2017",

"rating" : "4"

}

]

}