**Name: Aditya Shankar Khorne TE-C-06**

**Assignment: 10**

1. **Create Database**

> use Employee

switched to db Employee

1. **Create Collection**

**> db.createCollection("emp1")**

**{ "ok" : 1 }**

1. **Insert Documents in emp1 Collection**

**> db { eno: 1, ename: "John", address: "New York", sal: 12000 },.. { eno: 2, ename: "Alice", address: "Los Angeles", sal: 9000 }, { eno: 2, ename: "Alice", address: "Los Angeles", sal: 900**

**... { eno: 3, ename: "Bob", address: "Chicago", sal: 15000 },**

**... { eno: 4, ename: "Nina", address: "Houston", sal: 6000 },**

**... { eno: 5, ename: "Kevin", address: "Phoenix", sal: 4500 }**

**... ])**

**{**

**"acknowledged" : true,**

**"insertedIds" : [**

**ObjectId("6707b483a2df0be88432664b"),**

**ObjectId("6707b483a2df0be88432664c"),**

**ObjectId("6707b483a2df0be88432664d"),**

**ObjectId("6707b483a2df0be88432664e"),**

**ObjectId("6707b483a2df0be88432664f")**

**]**

**}**

1. **Display All Documents**

**> db.emp1.find().pretty()**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664b"),**

**"eno" : 1,**

**"ename" : "John",**

**"address" : "New York",**

**"sal" : 12000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664c"),**

**"eno" : 2,**

**"ename" : "Alice",**

**"address" : "Los Angeles",**

**"sal" : 9000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664d"),**

**"eno" : 3,**

**"ename" : "Bob",**

**"address" : "Chicago",**

**"sal" : 15000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664e"),**

**"eno" : 4,**

**"ename" : "Nina",**

**"address" : "Houston",**

**"sal" : 6000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664f"),**

**"eno" : 5,**

**"ename" : "Kevin",**

**"address" : "Phoenix",**

**"sal" : 4500**

1. **Insert Document with Custom ObjectId**

**> db.emp1.insertOne({ \_id: ObjectId(), eno: 6, ename: "Sara", address: "Dallas", sal: 11000 })bjectId(), eno: 6, ename: "Sara", addr**

**{**

**"acknowledged" : true,**

**"insertedId" : ObjectId("6707b48fa2df0be884326650")**

**}**

1. **Display Employees with Salary Greater Than 5000**

**> db.emp1.find({ sal: { $gt: 5000 } }).pretty()**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664b"),**

**"eno" : 1,**

**"ename" : "John",**

**"address" : "New York",**

**"sal" : 12000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664c"),**

**"eno" : 2,**

**"ename" : "Alice",**

**"address" : "Los Angeles",**

**"sal" : 9000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664d"),**

**"eno" : 3,**

**"ename" : "Bob",**

**"address" : "Chicago",**

**"sal" : 15000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664e"),**

**"eno" : 4,**

**"ename" : "Nina",**

**"address" : "Houston",**

**"sal" : 6000**

**}**

**{**

**"\_id" : ObjectId("6707b48fa2df0be884326650"),**

**"eno" : 6,**

**"ename" : "Sara",**

**"address" : "Dallas",**

**"sal" : 11000**

**}**

1. **Display Employees with Salary Less Than 15000**

**> db.emp1.find({ sal: { $lt: 15000 } }).pretty()**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664b"),**

**"eno" : 1,**

**"ename" : "John",**

**"address" : "New York",**

**"sal" : 12000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664c"),**

**"eno" : 2,**

**"ename" : "Alice",**

**"address" : "Los Angeles",**

**"sal" : 9000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664e"),**

**"eno" : 4,**

**"ename" : "Nina",**

**"address" : "Houston",**

**"sal" : 6000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664f"),**

**"eno" : 5,**

**"ename" : "Kevin",**

**"address" : "Phoenix",**

**"sal" : 4500**

**}**

**{**

**"\_id" : ObjectId("6707b48fa2df0be884326650"),**

**"eno" : 6,**

**"ename" : "Sara",**

**"address" : "Dallas",**

**"sal" : 11000**

**}**

1. **Display Employees with Salary Greater Than 10000 and Less Than 20000**

**> db.emp1.find({ sal: { $gt: 10000, $lt: 20000 } }).pretty()**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664b"),**

**"eno" : 1,**

**"ename" : "John",**

**"address" : "New York",**

**"sal" : 12000**

**}**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664d"),**

**"eno" : 3,**

**"ename" : "Bob",**

**"address" : "Chicago",**

**"sal" : 15000**

**}**

**{**

**"\_id" : ObjectId("6707b48fa2df0be884326650"),**

**"eno" : 6,**

**"ename" : "Sara",**

**"address" : "Dallas",**

**"sal" : 11000**

**}**

1. **Update Salary of All Employees by 10%**

**> db.emp1.updateMany({}, { $mul: { sal: 1.1 } })**

**{ "acknowledged" : true, "matchedCount" : 6, "modifiedCount" : 6 }**

1. **Delete Employees with Salary Less Than 5000**

**> db.emp1.remove({ sal: { $lt: 5000 } })**

**WriteResult({ "nRemoved" : 1 })**

1. **Rename Collection emp1 to employee1**

**> db.emp1.renameCollection("employee1")**

**{ "ok" : 1 }**

1. **Display Employees Whose Name Starts with 'n'**

**> db.employee1.find({ ename: { $regex: /^n/i } }).pretty()**

**{**

**"\_id" : ObjectId("6707b483a2df0be88432664e"),**

**"eno" : 4,**

**"ename" : "Nina",**

**"address" : "Houston",**

**"sal" : 6600.000000000001**

**}**

1. **Sort Employees by Name in Ascending Order**

> db.employee1.find().sort({ ename: 1 }).pretty()

{

"\_id" : ObjectId("6707b483a2df0be88432664c"),

"eno" : 2,

"ename" : "Alice",

"address" : "Los Angeles",

"sal" : 9900

}

{

"\_id" : ObjectId("6707b483a2df0be88432664d"),

"eno" : 3,

"ename" : "Bob",

"address" : "Chicago",

"sal" : 16500

}

{

"\_id" : ObjectId("6707b483a2df0be88432664b"),

"eno" : 1,

"ename" : "John",

"address" : "New York",

"sal" : 13200.000000000002

}

{

"\_id" : ObjectId("6707b483a2df0be88432664e"),

"eno" : 4,

"ename" : "Nina",

"address" : "Houston",

"sal" : 6600.000000000001

}

{

"\_id" : ObjectId("6707b48fa2df0be884326650"),

"eno" : 6,

"ename" : "Sara",

"address" : "Dallas",

"sal" : 12100.000000000002

}

>