Week 2



**I. Perform the following DB operations using MongoDB.**

**1. Create a database “Student” with the following attributes Rollno, Age, ContactNo, Email-**

**Id.**

**2. Insert appropriate values**

**3. Write query to update Email-Id of a student with rollno 10.**

**4. . Replace the student name from “ABC” to “FEM” of rollno 11**

Solution:

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.createCollection("Student")

;

{ ok: 1 }

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.insert({\_id:1,name:"Alice",rollNo:80,age:20,phNo:"9999988888",email:"alice@gmail.com"});

DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.

{ acknowledged: true, insertedIds: { '0': 1 } }

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.insert({\_id:2,name:"Bob",rollNo:81,age:20,phno:"8888855555",email:"bob@gmail.com"});

{ acknowledged: true, insertedIds: { '0': 2 } }

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.insert({\_id:3,name:"Cath",rollNo:82,age:21,phno:"8888877777",email:"cath@gmail.com"});

{ acknowledged: true, insertedIds: { '0': 3 } }

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.find();

[

{

\_id: 1,

name: 'Alice',

rollNo: 80,

age: 20,

phNo: '9999988888',

email: 'alice@gmail.com'

},

{

\_id: 2,

name: 'Bob',

rollNo: 81,

age: 20,

email: 'bob@gmail.com',

phNo: '8888855555'

},

{

\_id: 3,

name: 'Cath',

rollNo: 82,

age: 21,

email: 'cath@gmail.com',

phNo: '8888877777'

}

]

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.update({rollNo:80},

{$set:{email:"alice123@gmail.com"}});

DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

**II. Perform the following DB operations using MongoDB.**

**1. Create a collection by name Customers with the following attributes.**

**Cust\_id, Acc\_Bal, Acc\_Type**

**2. Insert at least 5 values into the table**

**3. Write a query to display those records whose total account balance is greater than**

**1200 of account type ‘Z’ for each customer\_id.**

**4. Determine Minimum and Maximum account balance for each customer\_i**

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.createCollection("

Customers");

{ ok: 1 }

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Student.insertOne({custId:1,accBal:10000,accType:"saving"});

{

acknowledged: true,

insertedId: ObjectId('660295b055dc2f3d86c4479f')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.insertOne({custId:1,accBal:10000,accType:"saving"});

{

acknowledged: true,

insertedId: ObjectId('660295c155dc2f3d86c447a0')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.insertOne({custId:2,accBal:50000,accType:"current"});

{

acknowledged: true,

insertedId: ObjectId('6602960055dc2f3d86c447a1')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.insertOne({custId:3,accBal:60000,accType:"current"});

{

acknowledged: true,

insertedId: ObjectId('6602960e55dc2f3d86c447a2')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.insertOne({custId:4,accBal:20000,accType:"savings"});

{

acknowledged: true,

insertedId: ObjectId('6602961c55dc2f3d86c447a3')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.insertOne({custId:5,accBal:200000,accType:"current"});

{

acknowledged: true,

insertedId: ObjectId('6602962955dc2f3d86c447a4')

}

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.find();

[

{

\_id: ObjectId('

660295c155dc2f3d86c447a0'),

custId: 1,

accBal: 10000,

accType: 'savings'

},

{

\_id: ObjectId('6602960055dc2f3d86c447a1'),

custId: 2,

accBal: 50000,

accType: 'current'

},

{

\_id: ObjectId('6602960e55dc2f3d86c447a2'),

custId: 3,

accBal: 60000,

accType: 'current'

},

{

\_id: ObjectId('6602961c55dc2f3d86c447a3'),

custId: 4,

accBal: 20000,

accType: 'savings'

},

{

\_id: ObjectId('6602962955dc2f3d86c447a4'),

custId: 5,

accBal: 200000,

accType: 'current'

},

{

\_id: ObjectId('6602980955dc2f3d86c447a5'),

custId: 1,

accBal: 30000,

accType: 'savings'

},

{

\_id: ObjectId('6602982f55dc2f3d86c447a6'),

custId: 2,

accBal: 20000,

accType: 'current'

}

]

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.aggregate({$

match:{accType:'savings'}},{$group:{\_id:"$custId",TotalAccBal:{$sum:"$accBal"}}},{$match:{TotalAccBal:{$gt:20000}}});

[ { \_id: 1, TotalAccBal: 40000 } ]

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.aggregate({$group:{\_id:"$custId",minAccBal:{$min:"$accBal"},maxAccBal:{$max:"accBal"}}});

[

{ \_id: 1, minAccBal: 10000, maxAccBal: 'accBal' },

{ \_id: 4, minAccBal: 20000, maxAccBal: 'accBal' },

{ \_id: 5, minAccBal: 200000, maxAccBal: 'accBal' },

{ \_id: 2, minAccBal: 20000, maxAccBal: 'accBal' },

{ \_id: 3, minAccBal: 60000, maxAccBal: 'accBal' }

]

Atlas atlas-12eb3b-shard-0 [primary] MY\_DB> db.Customers.aggregate({$group:{\_id:"$custId",minAccBal:{$min:"$accBal"},maxAccBal:{$max:"$accBal"}}});

[

{ \_id: 3, minAccBal: 60000, maxAccBal: 60000 },

{ \_id: 4, minAccBal: 20000, maxAccBal: 20000 },

{ \_id: 5, minAccBal: 200000, maxAccBal: 200000 },

{ \_id: 2, minAccBal: 20000, maxAccBal: 50000 },

{ \_id: 1, minAccBal: 10000, maxAccBal: 30000 }

]



