# WEEK 10– NO SQL Lab 2

## (Tuesday, 24-01-2023)

## Perform the following DB operations using MongoDB.

- **Create a collection by name Customers with the following attributes Cust_id, Acc_Bal, Acc_Type.**

db.createCollection("Customer");

```
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.createCollection("Customer");
{ ok: 1 }
```

- **Insert at least 5 values into the table**

db.Customer.insert({Cust_id:1,Acc_bal:2000,Acc_type:"Z"});
db.Customer.insert({Cust_id:2,Acc_bal:1000,Acc_type:"Z"});
db.Customer.insert({Cust_id:3,Acc_bal:1500,Acc_type:"A"});
db.Customer.insert({Cust_id:4,Acc_bal:3500,Acc_type:"A"});
db.Customer.insert({Cust_id:1,Acc_bal:4000,Acc_type:"Z"});
db.Customer.insert({Cust_id:2,Acc_bal:2000,Acc_type:"A"});
db.Customer.insert({Cust_id:3,Acc_bal:4000,Acc_type:"Z"});
db.Customer.insert({Cust_id:4,Acc_bal:1000,Acc_type:"Z"});

```
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:1, Acc_Bal:2000, Acc_Type:"Z"});
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff8db051589b76459fcec") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:2, Acc_Bal:1000, Acc_Type:"Z"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff8fa051589b76459fced") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:3, Acc_Bal:1500, Acc_Type:"A"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff90a051589b76459fcee") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:4, Acc_Bal:3500, Acc_Type:"A"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff918051589b76459fcef") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:1, Acc_Bal:4000, Acc_Type:"Z"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff92c051589b76459fcf0") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:2, Acc_Bal:2000, Acc_Type:"A"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff93b051589b76459fcf1") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:3, Acc_Bal:4000, Acc_Type:"Z"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff94a051589b76459fcf2") }
}
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.insert({Cust_id:4, Acc_Bal:1000, Acc_Type:"Z"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff955051589b76459fcf3") }
}
```

- **Write a query to display those records whose total account balance is greater than 1200 of account type 'Z' for each customer_id.**

db.Customer.find({Acc_Type:"Z", Acc_Bal:{$gt:1200}});

```
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.find({Acc_Type:"Z",Acc_Bal:{$gt:1200}});
[
  {
    _id: ObjectId("63cff8db051589b76459fcec"),
    Cust_id: 1,
    Acc_Bal: 2000,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId("63cff92c051589b76459fcf0"),
    Cust_id: 1,
    Acc_Bal: 4000,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId("63cff94a051589b76459fcf2"),
    Cust_id: 3,
    Acc_Bal: 4000,
    Acc_Type: 'Z'
  }
]
```

- ## **Determine Minimum and Maximum account balance for each customer_id.**

db.Customer.aggregrate([{$group:{_id:"$Cust_id","Acc_Bal":{$max:"$Acc_Bal"}}}])
db.Customer.aggregrate([{$group:{_id:"$Cust_id","Acc_Bal":{$min:"$Acc_Bal"}}}])

```
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.aggregate([{$group:{_id:"$Cust_id","Acc_Bal":{$max:"$Acc_Bal"}}}])
[
  { _id: 4, Acc_Bal: 3500 },
  { _id: 1, Acc_Bal: 4000 },
  { _id: 3, Acc_Bal: 4000 },
  { _id: 2, Acc_Bal: 2000 }
]
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.aggregate([{$group:{_id:"$Cust_id","Acc_Bal":{$min:"$Acc_Bal"}}}])
[
  { _id: 3, Acc_Bal: 1500 },
  { _id: 2, Acc_Bal: 1000 },
  { _id: 4, Acc_Bal: 1000 },
  { _id: 1, Acc_Bal: 2000 }
]
```

- ## **Export the created collection into local file system**

mongoexport mongodb+srv://dhiksha:<password>@cluster0.xbmgopf.mongodb.net/Lab_9
--collection=Customer -- out C:\Users\dhiks\Desktop\export\output.json

```
C:\Users\dhiks\Desktop\dbms>mongoexport mongodb+srv://dhiksha:123dolphin789@cluster0.xbmgopf.mongodb.net/Lab_9
--collection=Customer --out C:\Users\dhiks\Desktop\export\output.json
2023-01-24T21:31:29.988+0530     connected to: mongodb+srv://[**REDACTED**]@cluster0.xbmgopf.mongodb.net/Lab_9
2023-01-24T21:31:30.222+0530     exported 8 records
```

## ● Drop the table

db.Customer.drop();

```
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.drop();
true
Atlas atlas-kfzjtm-shard-0 [primary] Lab_9> db.Customer.find();
```

## ● Import a given csv dataset from local file system into mongodb collection.

mongoimport mongodb+srv://dhiksha:<password>@cluster0.xbmgopf.mongodb.net/Lab_9
--collection=new_Customer  – type json –file C:\Users\dhiks\Desktop\export\output.json

```
C:\Users\dhiks\Desktop\dbms>mongoimport mongodb+srv://dhiksha:123dolphin789@cluster0.xbmgopf.mongodb.net/Lab_9
--collection=new_Customer --type json --file C:\Users\dhiks\Desktop\export\output.json
2023-01-24T21:34:36.351+0530     connected to: mongodb+srv://[**REDACTED**]@cluster0.xbmgopf.mongodb.net/Lab_9
2023-01-24T21:34:36.582+0530     8 document(s) imported successfully. 0 document(s) failed to import.
```