

9.NOSQL

Questions

Create a database "Student" with the following attributes

Rollno, Age, ContactNo, Email-Id.

Insert appropriate values

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

Replace the student name from "ABC" to "FEM" of rollno 11.

5. Export the created table into local file system

6. Drop the table

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

1. Create a database "Student" with the following attributes

Rollno, Age, ContactNo, Email-Id.

>>db.createCollection("Student");

```
Atlas atlas-f5xs60-shard-0 [primary] myFirstDatabase> db.createCollection("student")
{ ok: 1 }
```

2. Insert appropriate values

```
db.Student.insert({RollNo:1,Age:21,Cont:9876,email:"antara.de9@gmail.com"});
```

```
db.Student.insert({RollNo:2,Age:22,Cont:9976,email:"anushka.de9@gmail.com"});
```

```
db.Student.insert({RollNo:3,Age:21,Cont:5576,email:"anubhav.de9@gmail.com"});
```

```
db.Student.insert({RollNo:4,Age:20,Cont:4476,email:"pani.de9@gmail.com"});
```

```
db.Student.insert({RollNo:10,Age:23,Cont:2276,email:"rekha.de9@gmail.com"});
```

```
db.Student.insert({RollNo:11,Age:22,Name:"ABC",Cont:2276,email:"rea.de9@gmail.com"});
```

Queries

3) Write query to update Email-Id of a student with roll no 10.

```
>>db.Student.update({RollNo:10},{ $set:{email:"Abhinav@gmail.com"}})
```

```
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

4) Replace the student name from "ABC" to "FEM" of roll no 11

```
>>db.Student.update({RollNo:11,Name:"ABC"},{$set:{Name: "FEM"}})
```

```
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

5) Export the created table into local file system

mongoexport

```
mongodb+srv://antararc:Test1234@cluster0.mfnfeys.mongodb.net/myFirstDatabase
--collection=Student --out C:\Users\Desktop\Downloads\output.json
```

```
C:\Users\amshu\OneDrive\Desktop\Downloads\mongodb-database-tools-windows-x86_64-100.6.1\mongodb-database-tools-windows-x86_64-100.6.1\bin>mongoexport mongodb+srv://AmshuGM:
amshumongodb@cluster0.8zvy7r7.mongodb.net/myFirstDatabase --collection=Student --out C:\Users\amshu\OneDrive\Desktop\Downloads\output.json
2023-01-24T20:41:38.978+0530   connected to: mongodb+srv://[**REDACTED**]@cluster0.8zvy7r7.mongodb.net/myFirstDatabase
2023-01-24T20:41:39.264+0530   exported 6 records
```

6) Drop the table

```
>>db.Student.drop();
```

```
Atlas atlas-f5xs60-shard-0 [primary] myFirstDatabase> db.student.drop()
true
```

7) Import a given csv dataset from local file system into mongodb collection.

```
>>mongoimport
```

```
mongodb+srv://antararc:Test1234@cluster0.mfnfeys.mongodb.net/myFirstDatabase  
--collection=nStudent --type json --file C:\Users\\Desktop\Downloads\output.json
```

```
OneDrive\Desktop\Downloads\mongodb-database-tools-windows-x86_64-100.6.1\mongodb-database-tools-windows-x86_64-100.6.1\bin>mongoimport mongodb+srv:
```

```
smongodb@cluster0.8zvy7r7.mongodb.net/myFirstDatabase --collection=nStudent --type json --file C:\Users\OneDrive\Desktop\Downloads\output.json
```

```
2023-01-24T20:43:49.032+0530 connected to: mongodb+srv://[**REDACTED**]@cluster0.8zvy7r7.mongodb.net/myFirstDatabase
```

```
2023-01-24T20:43:49.420+0530 6 document(s) imported successfully. 0 document(s) failed to import.
```

Questions

Create a collection by name Customers with the following attributes.

Cust_id, Acc_Bal, Acc_Type

Insert at least 5 values into the table

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

Determine Minimum and Maximum account balance for each customer_id.

Export the created collection into local file system

Drop the table

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

1. Create a collection by name Customers with the following attributes. Cust_id, Acc_Bal, Acc_Type `db.createCollection("customer");`

2. Insert at least 5 values into the table

```
db.customer.insert({custid:1,accbalance:10000,acctype:'A'});  
db.customer.insert({custid:1,accbalance:8000,acctype:'Y'});  
db.customer.insert({custid:1,accbalance:5000,acctype:'Z'});  
db.customer.insert({custid:2,accbalance:5000,acctype:'X'});  
db.customer.insert({custid:2,accbalance:9000,acctype:'X'});  
db.customer.insert({custid:2,accbalance:15000,acctype:'Y'});  
db.customer.insert({custid:3,accbalance:9000,acctype:'Z'});
```

```
db.customer.insert({custid:3,accbalance:4000,acctype:'X'});
db.customer.insert({custid:3,accbalance:11000,acctype:'Y'});
db.customer.insert({custid:3,accbalance:21000,acctype:'Z'});
```

```
insertedIds: { 0: ObjectId("63cfd1b9fa3367695c5a26e0") }
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:1,Acc_bal:8000,Acc_type:'Y'}, {Cust_id:1,Acc_bal:5000,Acc_type:'Z'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd211fa3367695c5a26ec") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:1,Acc_bal:5000,Acc_type:'Z'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd25bfa3367695c5a26ed") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:2,Acc_Bal:5000,Acc_type:'X'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd29afa3367695c5a26ee") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:2,Acc_Bal:6000,Acc_type:'Y'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd2acfa3367695c5a26ef") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:2,Acc_Bal:9000,Acc_type:'Z'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd2bdfa3367695c5a26f0") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:3,Acc_Bal:4000,Acc_type:'X'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd2e7fa3367695c5a26f1") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:3,Acc_Bal:11000,Acc_type:'Y'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd2f9fa3367695c5a26f2") }
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.insert({Cust_id:3,Acc_Bal:21000,Acc_type:'Z'});
{
  acknowledged: true,
  insertedIds: { 0: ObjectId("63cfd307fa3367695c5a26f3") }
}
```

```
]
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.find({Acc_type:'Z',Acc_Bal:{$gt:1200}});
[
  {
    _id: ObjectId("63cfd25bfa3367695c5a26ed"),
    Cust_id: 1,
    Acc_type: 'Z',
    Acc_Bal: 5000
  },
  {
    _id: ObjectId("63cfd2bdfa3367695c5a26f0"),
    Cust_id: 2,
    Acc_Bal: 9000,
    Acc_type: 'Z'
  },
  {
    _id: ObjectId("63cfd307fa3367695c5a26f3"),
    Cust_id: 3,
    Acc_Bal: 21000,
    Acc_type: 'Z'
  }
]
Atlas atlas-e3stfn-shard-0 [primary] Lab9>
```

```
mongosh mongodb+srv://<credentials>@cluster0.vw5q3.mongodb.net/Lab9
{
  Cust_id: 1,
  Acc_bal: 10000,
  Acc_type: 'X'
},
{
  _id: ObjectId("63cfd211fa3367695c5a26ec"),
  Cust_id: 1,
  Acc_bal: 8000,
  Acc_type: 'Y'
},
{
  _id: ObjectId("63cfd25bfa3367695c5a26ed"),
  Cust_id: 1,
  Acc_bal: 5000,
  Acc_type: 'Z'
},
{
  _id: ObjectId("63cfd29afa3367695c5a26ee"),
  Cust_id: 2,
  Acc_bal: 9000,
  Acc_type: 'X'
},
{
  _id: ObjectId("63cfd2acfa3367695c5a26ef"),
  Cust_id: 2,
  Acc_bal: 6000,
  Acc_type: 'Y'
},
{
  _id: ObjectId("63cfd2bdfa3367695c5a26f0"),
  Cust_id: 2,
  Acc_bal: 9000,
  Acc_type: 'Z'
},
{
  _id: ObjectId("63cfd2e7fa3367695c5a26f1"),
  Cust_id: 3,
  Acc_bal: 4000,
  Acc_type: 'X'
},
{
  _id: ObjectId("63cfd2f9fa3367695c5a26f2"),
  Cust_id: 3,
  Acc_bal: 11000,
  Acc_type: 'Y'
},
{
  _id: ObjectId("63cfd307fa3367695c5a26f3"),
  Cust_id: 3,
  Acc_bal: 21000,
  Acc_type: 'Z'
}
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.find({Acc_type:'Z',Acc_bal:{$gt:1200}});
{
  _id: ObjectId("63cfd25bfa3367695c5a26ed"),
  Cust_id: 1,
  Acc_bal: 5000,
  Acc_type: 'Z'
}
}
Atlas atlas-e3stfn-shard-0 [primary] Lab9>
```

db.customer.aggregate([{\$group:{_id:"\$custid","accbalance":{\$max:"accbalance"}}}])

db.customer.aggregate([{\$group:{_id:"\$custid","accbalance":{\$min:"accbalance"}}}])

```
Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.aggregate([{$group:{_id:"$Cust_id","Acc_Bal":{$max:"$Acc_Bal"}}}]);
[
  { _id: 3, Acc_Bal: 21000 },
  { _id: 2, Acc_Bal: 9000 },
  { _id: 1, Acc_Bal: 10000 }
]

Atlas atlas-e3stfn-shard-0 [primary] Lab9> db.Customer.aggregate([{$group:{_id:"$Cust_id","Acc_Bal":{$min:"$Acc_Bal"}}}]);
[
  { _id: 3, Acc_Bal: 4000 },
  { _id: 1, Acc_Bal: 5000 },
  { _id: 2, Acc_Bal: 5000 }
]
1
```

Export the created collection into local file system

```
F:\mongodb>mongoexport mongodb+srv://<cluster0.dyo62sf.mongodb.net/week10 --collection=cus
tomers --out F:\mongodb\Downloads\customeroutput.json
```

```
2023-01-24T18:25:41.177+0530    connected to: mongodb+srv://[**REDACTED**]@cluster0.dyo62sf.mongodb.net/week10
2023-01-24T18:25:41.691+0530    exported 8 records
```

Drop the table

db.customer.drp()

```
Atlas atlas-125fdy-shard-0 [primary] week10> db.Customers.drop();
true
Atlas atlas-125fdy-shard-0 [primary] week10>
```

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

```
2023-01-24T18:33:21.636+0530    connected to: mongodb+srv://[**REDACTED**]@cluster0.dyo62sf.mongodb.net/week10
2023-01-24T18:33:22.074+0530    8 document(s) imported successfully. 0 document(s) failed to import.
```