

## **NO SQL**

### **STUDENT DATABASE**

1. Create a database "Student" with the following attributes Rollno, Age, ContactNo, Email-Id.
2. Insert appropriate values
3. Write a query to update Email-Id of a student with rollno 10.
4. 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.

### **QUERIES**

1. Create a database "Student" with the following attributes Rollno, Age, ContactNo, Email-Id.

```
db.createCollection("Student");
```

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"});
```

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

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

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

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

5. Export the created table into local file system

```
mongoexport  
mongodb+srv://NSQ:DEEPINISURESH@cluster0.mfnfeys.
```

```
mongodb.net/myDB --collection=Student --out  
C:\deepi\Downloads\output.json
```

## 6. Drop the table

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

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

```
mongoimport  
mongodb+srv://NSQ:DEEPINISURESH@cluster0.mfnfeys.m  
ongodb.net/myDB --collection=New_Student --type json  
--file C:\deepi\Downloads\output.json
```

```
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.createCollection("Student");  
{ ok: 1 }  
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.insert({RollNo:1, Age:21, Cont:9876, email:"antara.de9@gmail.com"});  
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId("63cfe9d1578f04a88f66485c") }  
}  
Atlas atlas-76fkrr-shard-0 [primary] NSQ>  
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.insert({RollNo:2, Age:22, Cont:9976, email:"anushka.de9@gmail.com"});  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId("63cfe9d1578f04a88f66485d") }  
}  
Atlas atlas-76fkrr-shard-0 [primary] NSQ>  
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.insert({RollNo:3, Age:21, Cont:5576, email:"anubhav.de9@gmail.com"});  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId("63cfe9d2578f04a88f66485e") }  
}  
Atlas atlas-76fkrr-shard-0 [primary] NSQ>  
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.insert({RollNo:4, Age:20, Cont:4476, email:"pani.de9@gmail.com"});  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId("63cfe9d2578f04a88f66485f") }  
}  
Atlas atlas-76fkrr-shard-0 [primary] NSQ>  
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.insert({RollNo:10, Age:23, Cont:2276, email:"rekha.de9@gmail.com"});  
{  
  acknowledged: true,  
  insertedIds: { '0': ObjectId("63cfe9d4578f04a88f664860") }  
}
```

```

Atlas atlas-76fkr-r-shard-0 [primary] NSQ> db.Student.insert({RollNo:10, Age:23, Cont:2276, email:"rekha.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cfe9d4578f04a88f664860") }
}
Atlas atlas-76fkr-r-shard-0 [primary] NSQ> db.Student.find()
[
  {
    _id: ObjectId("63cfe9d1578f04a88f66485c"),
    RollNo: 1,
    Age: 21,
    Cont: 9876,
    email: 'antara.de9@gmail.com'
  },
  {
    _id: ObjectId("63cfe9d1578f04a88f66485d"),
    RollNo: 2,
    Age: 22,
    Cont: 9976,
    email: 'anushka.de9@gmail.com'
  },
  {
    _id: ObjectId("63cfe9d2578f04a88f66485e"),
    RollNo: 3,
    Age: 21,
    Cont: 5576,
    email: 'anubhav.de9@gmail.com'
  },
  {
    _id: ObjectId("63cfe9d2578f04a88f66485f"),
    RollNo: 4,
    Age: 20,
    Cont: 4476,
    email: 'pani.de9@gmail.com'
  },
  {
    _id: ObjectId("63cfe9d4578f04a88f664860"),
    RollNo: 10,
    Age: 23,

```

```

  },
  {
    _id: ObjectId("63cfe9d4578f04a88f664860"),
    RollNo: 10,
    Age: 23,
    Cont: 2276,
    email: 'rekha.de9@gmail.com'
  }
]
Atlas atlas-76fkr-r-shard-0 [primary] NSQ> db.Student.update({RollNo:10},{ $set:{
... email:"Abhinav@gmail.com"}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-76fkr-r-shard-0 [primary] NSQ> db.Student.insert({RollNo:11, Age:22, Name:
... "ABC", Cont:2276, email:"rea.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cfea89578f04a88f664861") }
}

```

```
Atlas atlas-76fkrr-shard-0 [primary] NSQ> db.Student.update({RollNo:11,Name:"ABC"},{$set:{Name:"FEM"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-76fkrr-shard-0 [primary] NSQ> |
```

```
C:\Users\BMSCECSE>mongoexport mongodb+srv://antararc:Test1234@cluster0.mfnfeys.mongodb.net/myDB --collection=Student --out C:\Users\BMSCECSE\Downloads\output.json
2023-01-12T15:15:56.383+0530 connected to: mongodb+srv://[**REDACTED**]@cluster0.mfnfeys.mongodb.net/myDB
2023-01-12T15:15:56.497+0530 exported 7 records
```

```
Atlas atlas-mdgaz1-shard-0 [primary] myDB> db.New_Student.find()
[
  {
    _id: ObjectId("63bfcfd156eba0e23c3a5c74"),
    RollNo: 3,
    Age: 21,
    Cont: 5576,
    email: 'anubhav.de9@gmail.com'
  },
  {
    _id: ObjectId("63bfcf9a56eba0e23c3a5c72"),
    RollNo: 1,
    Age: 21,
    Cont: 9876,
    email: 'antara.de9@gmail.com'
  },
  {
    _id: ObjectId("63bfcfe456eba0e23c3a5c75"),
    RollNo: 4,
    Age: 20,
    Cont: 4476,
    email: 'pani.de9@gmail.com'
  },
  {
    _id: ObjectId("63bfd41356eba0e23c3a5c77"),
    RollNo: 10,
    Age: 24,
    Cont: 2276,
    email: 'Abhinav@gmail.com'
  },
  {
    _id: ObjectId("63bfcff656eba0e23c3a5c76"),
    RollNo: 5,
    Age: 23,
    Cont: 2276,
    email: 'rekha.de9@gmail.com'
  },
  {
    _id: ObjectId("63bfcfb456eba0e23c3a5c73"),
    RollNo: 2,
    Age: 22,
    Cont: 9976,
    email: 'anushka.de9@gmail.com'
  },
  {
    _id: ObjectId("63bfd4de56eba0e23c3a5c78"),
    RollNo: 11,
    Age: 22,
    Name: 'FEM',
    Cont: 2276,
    email: 'rea.de9@gmail.com'
  }
]
```

## **CUSTOMER DATABASE**

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\_id.
5. Export the created collection into local file system
6. Drop the table
7. Import a given csv dataset from local file system into mongodb Collection.

## **QUERIES**

1. Create a collection by name Customers with the following attributes. Cust\_id, Acc\_Bal, Acc\_Type

```
db.createCollection("Customers");
```

2. Insert at least 5 values into the table

```
db.Customers.insert({Cust_id:1,Acc_Bal:5000,Acc_Type:"Current"});
```

```
db.Customers.insert({Cust_id:2,Acc_Bal:2800,Acc_Type:"Current"});
```

```
db.Customers.insert({Cust_id:3,Acc_Bal:3000,Acc_Type:"Savings"});
```

```
db.Customers.insert({Cust_id:4,Acc_Bal:4500,Acc_Type:"Savings"});
```

```
db.Customers.insert({Cust_id:5,Acc_Bal:3000,Acc_Type:"Current"});
```

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

```
db.Customers.find({Acc_Type:"Savings",Acc_Bal:{$gt:1200}});
```

4. Determine Minimum and Maximum account balance for each Customer\_id.

```
db.Customers.find().sort({Acc_Bal:+1}).limit(1);
```

```
db.Customers.find().sort({Acc_Bal:-1}).limit(1);
```

5. Export the created collection into local file system

6. Drop the table

```
db.Customers.drop();
```

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

```
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.insert({Cust_id:1,Acc_Bal:5000,Acc_Type:"Savings"});
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff4ad2367415816e1a7ce") }
}
```



```

Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.insert({Cust_id:2,Acc_Bal:2800,Acc_Type:"Current"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff66d2367415816e1a7cf") }
}
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.insert({Cust_id:3,Acc_Bal:3000,Acc_Type:"Savings"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff6a02367415816e1a7d0") }
}
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.insert({Cust_id:4,Acc_Bal:4500,Acc_Type:"Current"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff6ca2367415816e1a7d1") }
}
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customer.insert({Cust_id:5,Acc_Bal:6000,Acc_Type:"Savings"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff6ef2367415816e1a7d2") }
}

```

```

Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.insert({Cust_id:5,Acc_Bal:3000,Acc_Type:"Savings"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cff7d22367415816e1a7d3") }
}
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.find();
[
  {
    _id: ObjectId("63cff4ad2367415816e1a7ce"),
    Cust_id: 1,
    Acc_Bal: 5000,
    Acc_Type: 'Savings'
  },
  {
    _id: ObjectId("63cff66d2367415816e1a7cf"),
    Cust_id: 2,
    Acc_Bal: 2800,
    Acc_Type: 'Current'
  },
  {
    _id: ObjectId("63cff6a02367415816e1a7d0"),
    Cust_id: 3,
    Acc_Bal: 3000,
    Acc_Type: 'Savings'
  },
  {
    _id: ObjectId("63cff6ca2367415816e1a7d1"),
    Cust_id: 4,
    Acc_Bal: 4500,
    Acc_Type: 'Current'
  },
  {
    _id: ObjectId("63cff7d22367415816e1a7d3"),
    Cust_id: 5,
    Acc_Bal: 3000,
    Acc_Type: 'Savings'
  }
]
Atlas atlas-6qm0d4-shard-0 [primary] Customers> |

```

```
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.find({Acc_Type:"Savings",Acc_Bal:{$gt:1200}});
[
  {
    _id: ObjectId("63cff4ad2367415816e1a7ce"),
    Cust_id: 1,
    Acc_Bal: 5000,
    Acc_Type: 'Savings'
  },
  {
    _id: ObjectId("63cff6a02367415816e1a7d0"),
    Cust_id: 3,
    Acc_Bal: 3000,
    Acc_Type: 'Savings'
  },
  {
    _id: ObjectId("63cff7d22367415816e1a7d3"),
    Cust_id: 5,
    Acc_Bal: 3000,
    Acc_Type: 'Savings'
  }
]

```

```
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.find().sort({Acc_Bal:-1}).limit(1);
[
  {
    _id: ObjectId("63cff4ad2367415816e1a7ce"),
    Cust_id: 1,
    Acc_Bal: 5000,
    Acc_Type: 'Savings'
  }
]
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.find().sort({Acc_Bal:+1}).limit(1);
[
  {
    _id: ObjectId("63cff66d2367415816e1a7cf"),
    Cust_id: 2,
    Acc_Bal: 2800,
    Acc_Type: 'Current'
  }
]
Atlas atlas-6qm0d4-shard-0 [primary] Customers> |

```

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

```

```
Atlas atlas-6qm0d4-shard-0 [primary] Customers> db.Customers.drop();
true
Atlas atlas-6qm0d4-shard-0 [primary] Customers> |

```