Lab 3

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

```
// Type here your mongodb commands
use Student
Using Student - Only one database allowed per session
db.createCollection("student")
"collection student created"
```

2. Insert appropriate values

```
db.student.insert({Rollno:1,age:19,contactno:3784950010,email:'xyz@gmail.com'})
{"result":{"ok":1,"n":1,"opTime":{"ts":"6881171738638417921","t":2}},"ops":[{"Rollno":1,"age":19,"contactno":3784950010,"email":"xyz@gmail.com","_id":"5f7e
db.student.insert({Rollno:10,age:12,contactno:3784950010,email:'xyz@gmail.com'})
{"result":{"ok":1,"n":1,"opTime":{"ts":"6881172129480441861","t":2}},"ops":[{"Rollno":10,"age":12,"contactno":3784950010,"email":"xyz@gmail.com","_id":"5f7
db.student.insert({Rollno:11,name:'ABC',age:19,contactno:3766950010,email:'yyz@gmail.com'})
{"result":{"ok":1,"n":1,"opTime":{"ts":"6881172447308021761","t":2}},"ops":[{"Rollno":11,"name":"ABC","age":19,"contactno":3766950010,"email":"yyz@gmail.co
```

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

```
db.student.update({Rollno:10},{$set:{email:'xxx@gmail.com'}})
{"result":{"n":1,"nModified":1,"opTime":{"ts":"6881174332798664705","t":2},"electionId":"7fffffff0000000000000002","ok":1,"$clusterTime":{"clusterTime":"6
```

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

```
db.student.update({Rollno:11},{$set:{name:'FEM'}})
{"result":{"n":1,"nModified":1,"opTime":{"ts":"6881174543252062210","t":2},"electionId":"7fffffff0000000000000002","ok":1,"$clusterTime":{"clusterTime":"68
```

5. Export the created table into local file system

```
mongoexport --db=Student --collection=student --type=csv  --out=Desktop/student.csv
```

6. Drop the table

```
db.student.drop()
```

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

```
mongoimport --db=Student --collection=students --type=csv \
   --columnsHaveTypes \
   --fields="Rollno.int32(),name.string(),age.int32(),contactno.int64(),email.string()" \
   --file=/Desktop/student.csv
```

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

```
db.createCollection("customer")

"collection customer created"
```

Cust_id, Acc_Bal, Acc_Type

2. Insert at least 5 values into the table

```
db.customer.insert({cust_id:111,acc_bal:2000,acc_type:'z'})
{"result":{"ok":1,"n":1,"opTime":{"ts":"6881177773067468801","t":2}},"ops":[{"cust_id":111,"acc_bal":2000,"acc_type":"z","_id":"5f7edab96c70490010271fd6"}]
db.customer.insert({cust_id:121,acc_bal:2400,acc_type:'x'})
{"result":{"ok":1,"n":1,"opTime":{"ts":"6881178601996156929","t":2}},"ops":[{"cust_id":121,"acc_bal":2400,"acc_type":"x","_id":"5f7edb7b6c70490010271fd7"}]
db.customer.insert({cust_id:131,acc_bal:1200,acc_type:'y'})
```

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.customer.find()
{"_id":"5f7edab96c70490010271fd6","cust_id":111,"acc_bal":2000,"acc_type":"z"}
{"_id":"5f7edb7b6c70490010271fd7","cust_id":121,"acc_bal":2400,"acc_type":"x"}
{"_id":"5f7edb9a6c70490010271fd8","cust_id":131,"acc_bal":1200,"acc_type":"y"}
{"_id":"5f7edbd96c70490010271fd9","cust_id":141,"acc_bal":1000,"acc_type":"z"}
{"_id":"5f7edbf06c70490010271fda","cust_id":151,"acc_bal":2100,"acc_type":"x"}
db.customer.find({acc_bal:{$gt:1200},acc_type:'z'}).pretty()
{
  "_id": "5f7edab96c70490010271fd6",
  "cust_id": 111,
  "acc_bal": 2000,
  "acc_type": "z"
```

4. Determine Minimum and Maximum account balance for each customer_id.

```
  "acc_type": "z"
}
db.customer.aggregate([{$group:{_id: "$cust_id",minmum: { $min: "$acc_bal" },maximum:{ $max:"$acc_bal"}}}])
```

5. Export the created collection into local file system

```
mongoexport --db=Student --collection=customer --type=csv  --out=Desktop/customer.csv
```

6. Drop the table

```
db.customer.drop()
```

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

```
mongoimport --db=Student --collection=customer --type=csv \
   --columnsHaveTypes \
   --fields="acc_id.int32(),acc_bal.int32(),acc_type.string()" \
   --file=/Desktop/customer.csv
```