

Ancy k J
RollNo:20

LABCYCLE 3

1. Install the MongoDB Compass GUI and configure it.

2. Create a collection student consists of details like rollno, name, phoneno, marks, address, year of course etc

```
db.student.insertOne({_id:  
{ "acknowledged" : true, "insertedId" : 30 }
```

3. Insert the details of the multiple students (atleast 5) in the form of documents in the student collection

```
> db.student.insertMany( [{_id:20, name:"abhilash", phoneno:1245567899,  
marks:95, addr:"eklm", yoc:2020}, {_id:12, name:"anu", phoneno:1567892345,  
marks:91, addr:"thrissur", yoc:2022}, {_id:42, name:"dinu", phoneno:1908672345,  
marks:93, addr:"plkd", yoc:2020}, {_id:08, name:"asha", phoneno:1678934261,  
marks:92, addr:"idukki", yoc:2019} ])  
{ "acknowledged" : true, "insertedIds" : [ 20, 12, 42, 8 ] }
```

```
> db.student.find()
```

```
{ "_id" : 30, "name" : "sujith", "phoneno" : 1234567899, "marks" : 99, "addr" :  
"thrissur", "yoc" : 2020 }  
{ "_id" : 20, "name" : "abhilash", "phoneno" : 1245567899, "marks" : 95, "addr" :  
"eklm", "yoc" : 2020 }  
{ "_id" : 12, "name" : "anu", "phoneno" : 1567892345, "marks" : 91, "addr" :  
"thrissur", "yoc" : 2022 }  
{ "_id" : 42, "name" : "dinu", "phoneno" : 1908672345, "marks" : 93, "addr" : "plkd",  
"yoc" : 2020 }  
{ "_id" : 8, "name" : "asha", "phoneno" : 1678934261, "marks" : 92, "addr" :  
"idukki", "yoc" : 2019 }
```

4. Retrieve the fields rollno, name, phoneno, marks, city for all the documents in the collection student

```
db.student.find({}, {yoc:0})  
{ "_id" : 30, "name" : "sujith", "phoneno" : 9876543212, "marks" : 99, "addr" :  
"thrissur" }
```

```
{ "_id" : 12, "name" : "anu", "phoneno" : 1567892345, "marks" : 91, "addr" :
"thrissur" }
{ "_id" : 42, "name" : "dinu", "phoneno" : 1908672345, "marks" : 93, "addr" :
"plkd" }
{ "_id" : 8, "name" : "asha", "phoneno" : 1678934261, "marks" : 92, "addr" :
"idukki" }
```

5.Display the details of students who achieved a score more than 90 and are from 'Thrissur'.

```
db.student.find({$and: [{addr:"thrissur"}, {marks: {$gt:90}}]})
{ "_id" : 30, "name" : "sujith", "phoneno" : 1234567899, "marks" : 99, "addr" :
"thrissur", "yoc" : 2020 }
{ "_id" : 12, "name" : "anu", "phoneno" : 1567892345, "marks" : 91, "addr" :
"thrissur", "yoc" : 2022 }
```

6.Update the phone number of Sujith in the student collection. Retrieve the updated information

```
db.student.updateOne({_id:30}, {$set: {phoneno:9876543212} } )
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

7.Update the year of course in all the documents in the student collection to 2021. Also retrieve the updated information.

```
db.student.updateMany({}, {$set: {yoc:2021} } )
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 5 }
```

8.Delete the details of the student whose name is 'Abhilash' from the student collection

```
db.student.deleteMany({name: "abhilash"})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.student.find()
{ "_id" : 30, "name" : "sujith", "phoneno" : 9876543212, "marks" : 99, "addr" :
"thrissur", "yoc" : 2021 }
{ "_id" : 12, "name" : "anu", "phoneno" : 1567892345, "marks" : 91, "addr" :
"thrissur", "yoc" : 2021 }
```

```
{ "_id" : 42, "name" : "dinu", "phoneno" : 1908672345, "marks" : 93, "addr" : "plkd",  
"yoc" : 2021 }  
{ "_id" : 8, "name" : "asha", "phoneno" : 1678934261, "marks" : 92, "addr" :  
"idukki", "yoc" : 2021 }
```

10. Arrange the name of the students in ascending order along with all the columns.

```
db.student.find().sort(  
{ "_id" : 12, "name" : "anu", "phoneno" : 1567892345, "marks" : 91, "addr" :  
"thrissur", "yoc" : 2021 }  
{ "_id" : 8, "name" : "asha", "phoneno" : 1678934261, "marks" : 92, "addr" :  
"idukki", "yoc" : 2021 }  
{ "_id" : 42, "name" : "dinu", "phoneno" : 1908672345, "marks" : 93, "addr" : "plkd",  
"yoc" : 2021 }  
{ "_id" : 30, "name" : "sujith", "phoneno" : 9876543212, "marks" : 99, "addr" :  
"thrissur", "yoc" : 2021 }
```