BDA Lab Assignment 2

1. Create database Institute.

```
> use institute
switched to db institute
>
```

2. Create collection Students.

```
> db.createCollection("Students")
{ "ok" : 1 }
>
```

3. Insert 5 document with above mentioned structure.

```
db["Students"].insertMany( [ { "StudentId":1,"Name":
"Pranav Bakre", "Branch": "Computer", "Address": {
"Area":"Karve Nagar", "City": "Pune", "Pincode": 411052}
, "Subjects": {"BDMS":90, "CN":95}, "AreaofInterest":
["Operating System","Systems","High Performance
Computing"]},{ "StudentId":2,"Name": "Vignesh Iyer",
"Branch": "Computer", "Address": { "Area":"Karve Nagar",
"City": "Pune", "Pincode": 411038}
, "Subjects": {"BDMS":99, "CN":85}, "AreaofInterest":
["Angular","Java","Not ML"]},{ "StudentId":3,"Name":
"Ritom Gupta", "Branch": "IT", "Address": {
"Area":"Earth", "City": "Earth", "Pincode": 411052}
, "Subjects": {"BDMS":90, "OOPS":0}, "AreaofInterest":
["AI","Pratik","Bitgrit"]},{ "StudentId":4,"Name": "Pratik
Gorade", "Branch": "Computer", "Address": {
"Area":"Chincholi Morachi", "City": "Pune", "Pincode":
404}
, "Subjects": {"SEPM": "File Nahi Di", "CN":"What is
Computer Networks?"}, "AreaofInterest": ["Operating
Sytsem","Systems","High Performance Computing",
"Jarvis"]},{"StudentId":1,"Name": "Aniket Raj", "Branch":
"Computer", "Address": { "Area":"Kothrud", "City": "Pune",
"Pincode": 411038}
, "Subjects": {"BDMS":90, "CN":95}, "AreaofInterest":
["Operating Sytsem","Systems","High Performance
Computing", "Spiders"]}])
```

4. Display all students information.

```
> db.Students.find()
{ "_id" : ObjectId("5f423efcebe10b3fc72d8dbb"), "StudentId"
: 1, "Name" : "Pranav Bakre", "Branch" : "Computer",
"Addres
s" : { "Area" : "Karve Nagar", "City" : "Pune", "Pincode" :
411052 }, "Subjects" : { "BDMS" : 90, "CN" : 95 },
```

```
"AreaofIn
terest" : [ "Operating System", "Systems", "High
Performance Computing" ] }
{ "_id" : ObjectId("5f423efcebe10b3fc72d8dbc"), "StudentId"
: 2, "Name" : "Vignesh Iyer", "Branch" : "Computer",
"Addres
s" : { "Area" : "Karve Nagar", "City" : "Pune", "Pincode" :
411038 }, "Subjects" : { "BDMS" : 99, "CN" : 85 },
"AreaofIn
terest" : [ "Angular", "Java", "Not ML" ] }
{ "_id" : ObjectId("5f423efcebe10b3fc72d8dbd"), "StudentId"
: 3, "Name" : "Ritom Gupta", "Branch" : "IT", "Address" : {
"Area" : "Earth", "City" : "Earth", "Pincode" : 411052 },
"Subjects" : { "BDMS" : 90, "OOPS" : 0 }, "AreaofInterest"
: [
 "AI", "Pratik", "Bitgrit" ] }
{ "_id" : ObjectId("5f423efcebe10b3fc72d8dbe"), "StudentId"
: 4, "Name" : "Pratik Gorade", "Branch" : "Computer",
"Addre
ss" : { "Area" : "Chincholi Morachi", "City" : "Pune",
"Pincode" : 404 }, "Subjects" : { "SEPM" : "File Nahi Di",
"CN" :
 "What is Computer Networks?" }, "AreaofInterest" : [
"Operating Sytsem", "Systems", "High Performance
Computing", "Jarv
is" ] }
{ "_id" : ObjectId("5f423efcebe10b3fc72d8dbf"), "StudentId"
: 1, "Name" : "Aniket Raj", "Branch" : "Computer",
"Address"
 : { "Area" : "Kothrud", "City" : "Pune", "Pincode" :
411038 }, "Subjects" : { "BDMS" : 90, "CN" : 95 },
"AreaofInterest
" : [ "Operating Sytsem", "Systems", "High Performance
Computing", "Spiders" ] }
>
```

```
> db.Students.find().pretty()
{
        "_id" : ObjectId("5f423efcebe10b3fc72d8dbb"),
        "StudentId" : 1,
        "Name" : "Pranav Bakre",
        "Branch" : "Computer",
        "Address" : {
                "Area" : "Karve Nagar",
                "City" : "Pune",
                "Pincode" : 411052
        },
        "Subjects" : {
                "BDMS" : 90,
```

```
                "CN" : 95
        },
        "AreaofInterest" : [
                "Operating System",
                "Systems",
                "High Performance Computing"
        ]
}
{

        "_id" : ObjectId("5f423efcebe10b3fc72d8dbc"),
        "StudentId" : 2,
        "Name" : "Vignesh Iyer",
        "Branch" : "Computer",
        "Address" : {
                "Area" : "Karve Nagar",
                "City" : "Pune",
                "Pincode" : 411038
        },
        "Subjects" : {
                "BDMS" : 99,
                "CN" : 85
        },
        "AreaofInterest" : [
                "Angular",
                "Java",
                "Not ML"
        ]
}
{

        "_id" : ObjectId("5f423efcebe10b3fc72d8dbd"),
        "StudentId" : 3,
        "Name" : "Ritom Gupta",
        "Branch" : "IT",
        "Address" : {
                "Area" : "Earth",
                "City" : "Earth",
                "Pincode" : 411052
        },
        "Subjects" : {
                "BDMS" : 90,
                "OOPS" : 0
        },
        "AreaofInterest" : [
                "AI",
                "Pratik",
                "Bitgrit"
        ]
}
{

        "_id" : ObjectId("5f423efcebe10b3fc72d8dbe"),
```

```
        "StudentId" : 4,
        "Name" : "Pratik Gorade",
        "Branch" : "Computer",
        "Address" : {
                "Area" : "Chincholi Morachi",
                "City" : "Pune",
                "Pincode" : 404
        },
        "Subjects" : {
                "SEPM" : "File Nahi Di",
                "CN" : "What is Computer Networks?"
        },
        "AreaofInterest" : [
                "Operating Sytsem",
                "Systems",
                "High Performance Computing",
                "Jarvis"
        ]
}
{

        "_id" : ObjectId("5f423efcebe10b3fc72d8dbf"),
        "StudentId" : 5,
        "Name" : "Aniket Raj",
        "Branch" : "Computer",
        "Address" : {
                "Area" : "Kothrud",
                "City" : "Pune",
                "Pincode" : 411038
        },
        "Subjects" : {
                "BDMS" : 90,
                "CN" : 95
        },
        "AreaofInterest" : [
                "Operating Sytsem",
                "Systems",
                "High Performance Computing",
                "Spiders"
        ]
}
>
```

5. Update student branch from IT to Computer of studentid 3.

```
>
db["Students"].updateOne({"StudentId":3},{$set:{"Branch":"
Computer"}})
{ "acknowledged" : true, "matchedCount" : 1,
"modifiedCount" : 1 }
>
```

6. Add interest Python in studentid 5.

```
>
db["Students"].updateOne({"StudentId":5},{$push:{"AreaofInt
erest":"Python"},$unset:{"Areaofinterest":1}})
{ "acknowledged" : true, "matchedCount" : 1,
"modifiedCount" : 1 }
```

7. Add one subject name and its score for Student Id 8.

```
>
db["Students"].updateOne({"StudentId":8},{$set:{"Subjects.
Stupidity":100} })
{ "acknowledged" : true, "matchedCount" : 1,
"modifiedCount" : 1 }
> db.Students.find().pretty()
```

8. Change City name from Pune to Delhi.

```
>
db["Students"].updateMany({},{$set:{"Address.City":"Delhi"}
})
{ "acknowledged" : true, "matchedCount" : 5,
"modifiedCount" : 5 }
```

9. Remove record with student id 3.

```
> db.Students.deleteOne({"StudentId":3})
{ "acknowledged" : true, "deletedCount" : 1 }
>
```

10. Drop collection.

```
> db.Students.drop(0
... )
true
```

11.