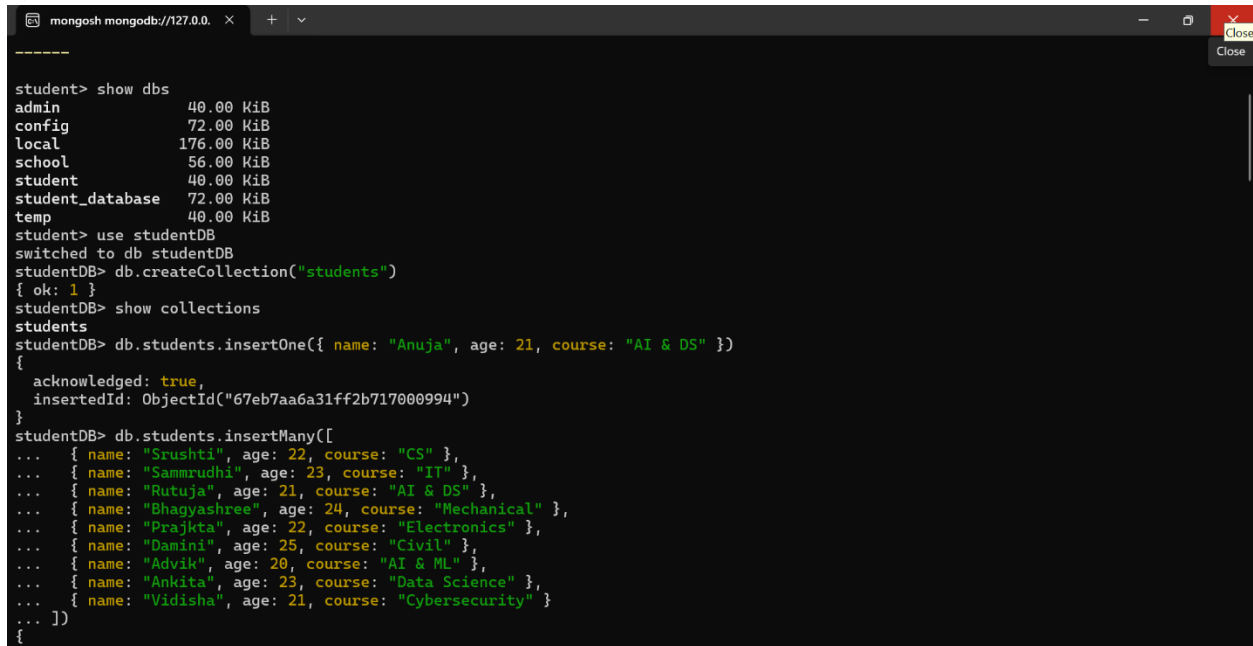


BDA Assignment 4

Mongo DB: Installation and Creation of database and Collection CRUD Document: Insert, Query, Update and Delete Document.

1) show dbs

2) use studentDB



```
-----
student> show dbs
admin          40.00 KiB
config         72.00 KiB
local          176.00 KiB
school         56.00 KiB
student        40.00 KiB
student_database 72.00 KiB
temp           40.00 KiB
student> use studentDB
switched to db studentDB
studentDB> db.createCollection("students")
{ ok: 1 }
studentDB> show collections
students
studentDB> db.students.insertOne({ name: "Anuja", age: 21, course: "AI & DS" })
{
  acknowledged: true,
  insertedId: ObjectId("67eb7aa6a31ff2b717000994")
}
studentDB> db.students.insertMany([
...   { name: "Srushiti", age: 22, course: "CS" },
...   { name: "Sammrudhi", age: 23, course: "IT" },
...   { name: "Rutuja", age: 21, course: "AI & DS" },
...   { name: "Bhagyashree", age: 24, course: "Mechanical" },
...   { name: "Prajakta", age: 22, course: "Electronics" },
...   { name: "Damini", age: 25, course: "Civil" },
...   { name: "Advik", age: 20, course: "AI & ML" },
...   { name: "Ankita", age: 23, course: "Data Science" },
...   { name: "Vidisha", age: 21, course: "Cybersecurity" }
... ])
{
}
```

3) using collection

insert data:

```
db.students.insertOne({ name: "Anuja", age: 21, course: "AI & DS" })
```

4) db.students.insertMany([

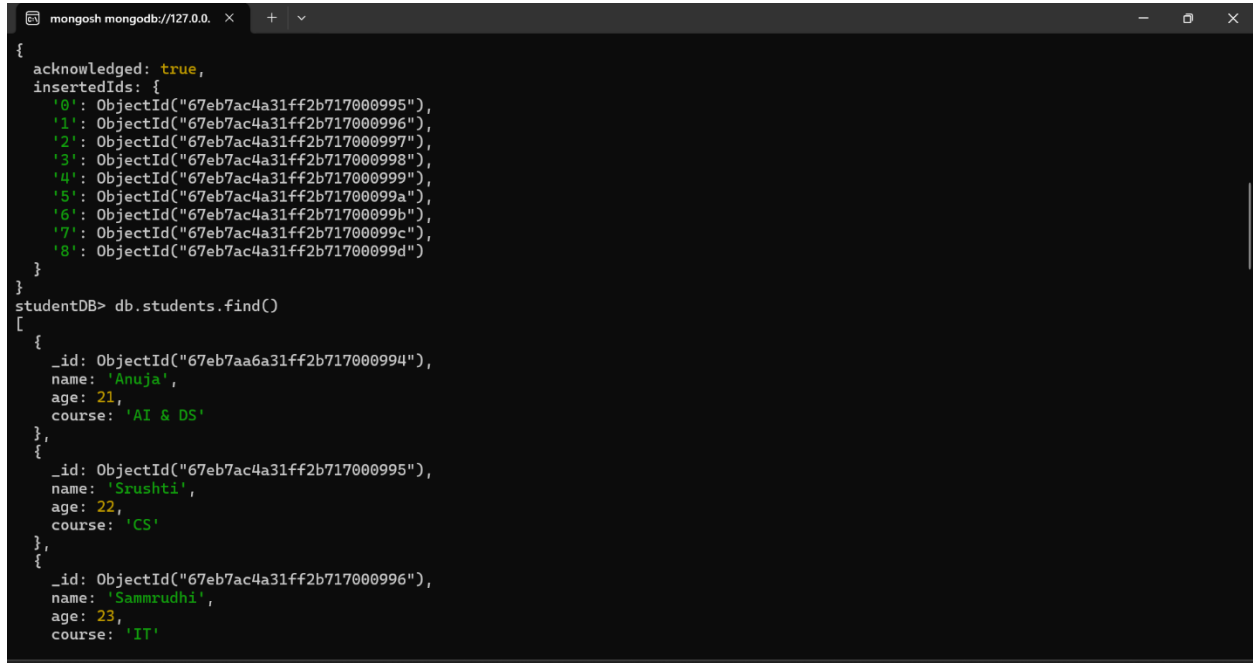
```
{ name: "Srushiti", age: 22, course: "CS" },
{ name: "Sammrudhi", age: 23, course: "IT" },
{ name: "Rutuja", age: 21, course: "AI & DS" },
{ name: "Bhagyashree", age: 24, course: "Mechanical" },
{ name: "Prajakta", age: 22, course: "Electronics" },
{ name: "Damini", age: 25, course: "Civil" },
{ name: "Advik", age: 20, course: "AI & ML" },
{ name: "Ankita", age: 23, course: "Data Science" },
```

```
{ name: "Vidisha", age: 21, course: "Cybersecurity" }
```

5) read operation

```
db.students.find()
```

```
db.students.findOne({ name: "Srushti" })
```



```
mongosh mongodb://127.0.0.1:27017/
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("67eb7ac4a31ff2b717000995"),
    '1': ObjectId("67eb7ac4a31ff2b717000996"),
    '2': ObjectId("67eb7ac4a31ff2b717000997"),
    '3': ObjectId("67eb7ac4a31ff2b717000998"),
    '4': ObjectId("67eb7ac4a31ff2b717000999"),
    '5': ObjectId("67eb7ac4a31ff2b71700099a"),
    '6': ObjectId("67eb7ac4a31ff2b71700099b"),
    '7': ObjectId("67eb7ac4a31ff2b71700099c"),
    '8': ObjectId("67eb7ac4a31ff2b71700099d")
  }
}
studentDB> db.students.find()
[
  {
    _id: ObjectId("67eb7aa6a31ff2b717000994"),
    name: 'Anuja',
    age: 21,
    course: 'AI & DS'
  },
  {
    _id: ObjectId("67eb7ac4a31ff2b717000995"),
    name: 'Srushti',
    age: 22,
    course: 'CS'
  },
  {
    _id: ObjectId("67eb7ac4a31ff2b717000996"),
    name: 'Sammrudhi',
    age: 23,
    course: 'IT'
  }
]
```

6)Update Document

```
db.students.updateOne(
```

```
  { name: "Anuja" },
```

```
  { $set: { age: 22, course: "AI & ML" } } )
```



```
mongosh mongodb://127.0.0.1:27017/
]
studentDB> db.students.findOne({ name: "Srushti" })
{
  _id: ObjectId("67eb7ac4a31ff2b717000995"),
  name: 'Srushti',
  age: 22,
  course: 'CS'
}
studentDB> db.students.updateOne(
...   { name: "Anuja" },
...   { $set: { age: 22, course: "AI & ML" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
studentDB> db.students.findOne({ name: "Anuja" })
{
  _id: ObjectId("67eb7aa6a31ff2b717000994"),
  name: 'Anuja',
  age: 22,
  course: 'AI & ML'
}
studentDB> db.students.deleteOne({ name: "Vidisha" })
{ acknowledged: true, deletedCount: 1 }
studentDB> db.students.find()
[
  {
    _id: ObjectId("67eb7aa6a31ff2b717000994"),
    name: 'Anuja',
  }
]
```

7) Delete Document

db.students.deleteOne({ name: "Vidisha" })

```
mongosh mongodb://127.0.0.1:27017/127.0.0.1
{
  "_id": ObjectId("67eb7ac4a31ff2b717000998"),
  "name": 'Bhagyashree',
  "age": 24,
  "course": 'Mechanical'
},
{
  "_id": ObjectId("67eb7ac4a31ff2b717000999"),
  "name": 'Prajakta',
  "age": 22,
  "course": 'Electronics'
},
{
  "_id": ObjectId("67eb7ac4a31ff2b71700099a"),
  "name": 'Damini',
  "age": 25,
  "course": 'Civil'
},
{
  "_id": ObjectId("67eb7ac4a31ff2b71700099b"),
  "name": 'Advik',
  "age": 20,
  "course": 'AI & ML'
},
{
  "_id": ObjectId("67eb7ac4a31ff2b71700099c"),
  "name": 'Ankita',
  "age": 23,
  "course": 'Data Science'
}
]
studentDB> db.students.countDocuments()
9
studentDB>
```