

3. Create a collection student consists of details like rollno, name, phoneno,city,year of course, score.

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

```
{ "ok" : 1 }
```

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

```
> db.student.insertMany([
  {rollno:1,name:"Sujith",phone_no:1234567890,marks:8.0,city:"Calicut",year_of_course:2020,score:8.0},
  {rollno:2,name:"Sarayu",phone_no:1357913579,marks:9.0,city:"Wayanad",year_of_course:2021,score:9.0},
  {rollno:3,name:"Arun",phone_no:2468024680,marks:9.2,city:"Kollam",year_of_course:2022,score:9.2},
  {rollno:4,name:"Sana",phone_no:0987654321,marks:9.5,city:"Thrissur",year_of_course:2020,score:9.5},
  {rollno:5,name:"Kavya",phone_no:1223344556,marks:9.8,city:"Trivandrum",year_of_course:2019,score:9.8},
  {rollno:6,name:"Shyam",phone_no:1212343456,marks:8.9,city:"Kannur",year_of_course:2023,score:8.9},
])

{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("681854d7ccea34f7b69421eb"),
    ObjectId("681854d7ccea34f7b69421ec"),
    ObjectId("681854d7ccea34f7b69421ed"),
    ObjectId("681854d7ccea34f7b69421ee"),
    ObjectId("681854d7ccea34f7b69421ef"),
    ObjectId("681854d7ccea34f7b69421f0")
  ]
}
```

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

```
> db.student.find({},
  {
    _id:0,
    rollno:1,
    name:1,
    phone_no:1,
    marks:1,
    city:1,
  }
)

{ "rollno" : 1, "name" : "Sujith", "phone_no" : 1234567890, "marks" : 8, "city" : "Calicut" }
```

```
{ "rollno" : 2, "name" : "Sarayu", "phone_no" : 1357913579, "marks" : 9, "city" : "Wayanad" }
{ "rollno" : 3, "name" : "Arun", "phone_no" : 2468024680, "marks" : 9.2, "city" : "Kollam" }
{ "rollno" : 4, "name" : "Sana", "phone_no" : 987654321, "marks" : 9.5, "city" : "Thrissur" }
{ "rollno" : 5, "name" : "Kavya", "phone_no" : 1223344556, "marks" : 9.8, "city" : "Trivandrum" }
{ "rollno" : 6, "name" : "Shyam", "phone_no" : 1212343456, "marks" : 8.9, "city" : "Kannur" }
```

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

```
> db.student.find({ $and:[
    {score:{ $gt:90 }},
    {city:"Thrissur"}
]})
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ee"), "rollno" : 4, "name" : "Sana", "phone_no" :
987654321, "marks" : 9.5, "city" : "Thrissur", "year_of_course" : 2020, "score" : 95 }
```

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

```
> db.student.updateOne({name:"Sujith"},{$set:{phone_no:9998887776}})
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
> db.student.find({name:"Sujith"})
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421eb"), "rollno" : 1, "name" : "Sujith", "phone_no" :
9998887776, "marks" : 8, "city" : "Calicut", "year_of_course" : 2020, "score" : 8 }
```

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

```
> db.student.updateMany({},{$set:{year_of_course:2021}})
```

```
{ "acknowledged" : true, "matchedCount" : 6, "modifiedCount" : 5 }
```

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

```
{ "_id" : ObjectId("681854d7ccea34f7b69421eb"), "rollno" : 1, "name" : "Sujith", "phone_no" :
9998887776, "marks" : 8, "city" : "Calicut", "year_of_course" : 2021, "score" : 8 }
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ec"), "rollno" : 2, "name" : "Sarayu", "phone_no" :
1357913579, "marks" : 9, "city" : "Wayanad", "year_of_course" : 2021, "score" : 90 }
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ed"), "rollno" : 3, "name" : "Arun", "phone_no" :
2468024680, "marks" : 9.2, "city" : "Kollam", "year_of_course" : 2021, "score" : 92 }
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ee"), "rollno" : 4, "name" : "Sana", "phone_no" :
987654321, "marks" : 9.5, "city" : "Thrissur", "year_of_course" : 2021, "score" : 95 }
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ef"), "rollno" : 5, "name" : "Kavya", "phone_no" :
1223344556, "marks" : 9.8, "city" : "Trivandrum", "year_of_course" : 2021, "score" : 98 }
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421f0"), "rollno" : 6, "name" : "Shyam", "phone_no" :
1212343456, "marks" : 8.9, "city" : "Kannur", "year_of_course" : 2021, "score" : 89 }
```

9. Display the city of 'Sarayu'.

```
> db.student.find({name:"Sarayu"},{_id:0,city:1})
```

```
{ "city" : "Wayanad" }
```

10. Retrieve the number of students who joined after May 2020 from the collection.

```
> db.student.find({year_of_course:{$gt:2020}}).count()
```

```
6
```

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

```
> db.student.find().sort({ name:1 })
```

```
{ "_id" : ObjectId("681854d7ccea34f7b69421ed"), "rollno" : 3, "name" : "Arun", "phone_no" :  
2468024680, "marks" : 9.2, "city" : "Kollam", "year_of_course" : 2021, "score" : 92 }  
{ "_id" : ObjectId("681854d7ccea34f7b69421ee"), "rollno" : 4, "name" : "Sanu", "phone_no" :  
987654321, "marks" : 9.5, "city" : "Thrissur", "year_of_course" : 2021, "score" : 95 }  
{ "_id" : ObjectId("681854d7ccea34f7b69421ec"), "rollno" : 2, "name" : "Sarayu", "phone_no" :  
1357913579, "marks" : 9, "city" : "Wayanad", "year_of_course" : 2021, "score" : 90 }  
{ "_id" : ObjectId("681854d7ccea34f7b69421f0"), "rollno" : 6, "name" : "Shyam", "phone_no" :  
1212343456, "marks" : 8.9, "city" : "Kannur", "year_of_course" : 2021, "score" : 89 }  
{ "_id" : ObjectId("681854d7ccea34f7b69421ef"), "rollno" : 5, "name" : "Suhaid", "phone_no" :  
1223344556, "marks" : 9.8, "city" : "Trivandrum", "year_of_course" : 2021, "score" : 98 }  
{ "_id" : ObjectId("681854d7ccea34f7b69421eb"), "rollno" : 1, "name" : "Sujith", "phone_no" :  
9998887776, "marks" : 8, "city" : "Calicut", "year_of_course" : 2021, "score" : 8 }
```

12. Rename attribute city as town.

```
> db.student.updateMany({},{$rename:{ "city":"town" }})
```

```
{ "acknowledged" : true, "matchedCount" : 6, "modifiedCount" : 6 }
```

13. Delete the details of the student whose name is 'Sujith' from the student collection

```
> db.student.deleteOne({ name:"Sujith" })
```

```
{ "acknowledged" : true, "deletedCount" : 1 }
```