LAB ASSIGNMENT NO.6 NoSQL

Create a database named college and then create a collection named Studlist.Insert some values into it [You can use the data in test.json file].Write a Mongodb Query to:

1. Display name (both fname and lname) and mark of all female students in MCA department.

2. Display the details of student who Secured highest mark in the course MCA.

3. Display all male students who secured A+ Grade.

4. Display Top 3 Students in Mechanical Department.

5. Display the details of female Students [fname, lname,grade,mark,contact] who achieved a mark more than 90.

6. Display the details of students who secured mark more than 80 but less than 90.

7. Display the Details of students whose name starts with "V".

8. Display all Students from Kollam.

9. Display all students does not belong to neither kollam nor Thiruvananthapuram.

10. Display all female Students who belong to either kollam or Thiruvananthapuram.

> use collage

switched to db collage

> db.createCollection("Studlist")

{ "ok" : 1 }

> db.Studlist.insertMany(

... [

... {

... "fname":"Ansiya",

... "lname":"Shajahan",

... "Gender":"Female",

... "Department":"MCA",

... "Mark":96,

... "Grade":"A+",

... "Place":"Thiruvananthapuram",

... "phnno":7510465620

... },

... {

... "fname":"Afsal",

... "lname":"Mohd",

... "Gender":"Male",

... "Department":"Mechanical",

... "Mark":98,

... "Grade":"A+",

... "Place":"Thiruvananthapuram",

... "phnno":9778476835

... },

... {

... "fname":"Suhail",

... "lname":"Mohd",

... "Gender":"Male",

... "Department":"Mechanical",

... "Mark":99,

... "Grade":"A+",

... "Place":"Kollam",

... "phnno":9645820823

... },

... {

... "fname":"Sahal",

... "lname":"Mohd",

... "Gender":"Male",

... "Department":"Mechanical",

... "Mark":99,

... "Grade":"A+",

... "Place":"Kollam",

... "phnno":9947291316

... },

... {

... "fname":"Amina",

... "lname":"Samad",

... "Gender":"Female",

... "Department":"MCA",

... "Mark":98,

... "Grade":"A+",

... "Place":"Ernakulam",

... "phnno":7510465620

... },

... {

... "fname":"Vahid",

... "lname":"Sherif",

... "Gender":"Male",

... "Department":"MCA",

... "Mark":88,

... "Grade":"A",

... "Place":"Idukki",

... "phnno":9497487862

... },

... {

... "fname":"Vajid",

... "lname":"Shein",

... "Gender":"Male",

... "Department":"Mechanical",

... "Mark":86,

... "Grade":"A",

... "Place":"Banglore",

... "phnno":7611199447

... },
... {
... "fname":"Shahid",
... "lname":"kareem",
... "Gender":"Female",
... "Department":"MCA",
... "Mark":86,
... "Grade":"A",
... "Place":"Kozhikode",
... "phnno":9744490953
... },
... {
... "fname":"Ashik",
... "lname":"Basheer",
... "Gender":"Male",
... "Department":"Mechanical",
... "Mark":83,
... "Grade":"B",
... "Place":"Thrissur",
... "phnno":7560883692
... },
... {
... "fname":"Safa",
... "lname":"Fathima",
... "Gender":"Female",
... "Department":"MCA",
... "Mark":100,
... "Grade":"A+",
... "Place":"Thiruvananthapuram",
... "phnno":9633334365
... },

```
... {
... "fname":"Arif",
... "lname":"Mohd",
... "Gender":"Male",
... "Department":"Mechanical",
... "Mark":86,
... "Grade":"A",
... "Place":"Kasargode",
... "phnno":8301001102
... }
...
... ]
... )
{
    "acknowledged" : true,
    "insertedIds" : [
        ObjectId("62a0b23644593c90c88ce086"),
        ObjectId("62a0b23644593c90c88ce087"),
        ObjectId("62a0b23644593c90c88ce088"),
        ObjectId("62a0b23644593c90c88ce089"),
        ObjectId("62a0b23644593c90c88ce08a"),
        ObjectId("62a0b23644593c90c88ce08b"),
        ObjectId("62a0b23644593c90c88ce08c"),
        ObjectId("62a0b23644593c90c88ce08d"),
        ObjectId("62a0b23644593c90c88ce08e"),
        ObjectId("62a0b23644593c90c88ce08f"),
        ObjectId("62a0b23644593c90c88ce090")
    ]
}
```

1>db.Studlist.find({Gender:"Female",Department:"MCA"},{fname:1,Mark:1,_id:0})

{ "fname" : "Ansiya", "Mark" : 96 }

{ "fname" : "Amina", "Mark" : 98 }

{ "fname" : "Shahid", "Mark" : 86 }

{ "fname" : "Safa", "Mark" : 100 }

2> db.Studlist.find({Department:"MCA"},{_id:0})

{ "fname" : "Ansiya", "lname" : "Shajahan", "Gender" : "Female", "Department" : "MCA", "Mark" : 96, "Grade" : "A+", "Place" : "Thiruvananthapuram", "phnno" : 7510465620 }

{ "fname" : "Amina", "lname" : "Samad", "Gender" : "Female", "Department" : "MCA", "Mark" : 98, "Grade" : "A+", "Place" : "Ernakulam", "phnno" : 7510465620 }

{ "fname" : "Vahid", "lname" : "Sherif", "Gender" : "Male", "Department" : "MCA", "Mark" : 88, "Grade" : "A", "Place" : "Idukki", "phnno" : 9497487862 }

{ "fname" : "Shahid", "lname" : "kareem", "Gender" : "Female", "Department" : "MCA", "Mark" : 86, "Grade" : "A", "Place" : "Kozhikode", "phnno" : 9744490953 }

{ "fname" : "Safa", "lname" : "Fathima", "Gender" : "Female", "Department" : "MCA", "Mark" : 100, "Grade" : "A+", "Place" : "Thiruvananthapuram", "phnno" : 9633334365 }

3>db.Studlist.find({Gender:"Male",Grade:"A+"},{fname:1,Grade:1,_id:0,Mark:1 ,Department:1})

{ "fname" : "Afsal", "Department" : "Mechanical", "Mark" : 98, "Grade" : "A+" }

{ "fname" : "Suhail", "Department" : "Mechanical", "Mark" : 99, "Grade" : "A+" }

{ "fname" : "Sahal", "Department" : "Mechanical", "Mark" : 99, "Grade" : "A+" }

4> db.Studlist.find({Department:"Mechanical"},{_id:0}).sort({Mark:-1}).limit(3)

{ "fname" : "Sahal", "lname" : "Mohd", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 99, "Grade" : "A+", "Place" : "Kollam", "phnno" : 9947291316 }

{ "fname" : "Suhail", "lname" : "Mohd", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 99, "Grade" : "A+", "Place" : "Kollam", "phnno" : 9645820823 }

{ "fname" : "Afsal", "lname" : "Mohd", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 98, "Grade" : "A+", "Place" : "Thiruvananthapuram", "phnno" : 9778476835 }

5> db.Studlist.find({Mark:{$gt:90}},{fname:1,Grade:1,Mark:1,phnno:1,_id:0})

{ "fname" : "Ansiya", "Mark" : 96, "Grade" : "A+", "phnno" : 7510465620 }

{ "fname" : "Afsal", "Mark" : 98, "Grade" : "A+", "phnno" : 9778476835 }

{ "fname" : "Suhail", "Mark" : 99, "Grade" : "A+", "phnno" : 9645820823 }

{ "fname" : "Sahal", "Mark" : 99, "Grade" : "A+", "phnno" : 9947291316 }

{ "fname" : "Amina", "Mark" : 98, "Grade" : "A+", "phnno" : 7510465620 }

{ "fname" : "Safa", "Mark" : 100, "Grade" : "A+", "phnno" : 9633334365 }

6>db.Studlist.find({Mark:{$lt:90,$gt:80}},{fname:1,Grade:1,Mark:1,phnno:1,_id:0})

{ "fname" : "Vahid", "Mark" : 88, "Grade" : "A", "phnno" : 9497487862 }

{ "fname" : "Vajid", "Mark" : 86, "Grade" : "A", "phnno" : 7611199447 }

{ "fname" : "Shahid", "Mark" : 86, "Grade" : "A", "phnno" : 9744490953 }

{ "fname" : "Ashik", "Mark" : 83, "Grade" : "B", "phnno" : 7560883692 }

{ "fname" : "Arif", "Mark" : 86, "Grade" : "A", "phnno" : 8301001102 }

7> db.Studlist.find({"fname":{$regex:/^V/}},{_id:0})

{ "fname" : "Vahid", "lname" : "Sherif", "Gender" : "Male", "Department" : "MCA", "Mark" : 88, "Grade" : "A", "Place" : "Idukki", "phnno" : 9497487862 }

{ "fname" : "Vajid", "lname" : "Shein", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 86, "Grade" : "A", "Place" : "Banglore", "phnno" : 7611199447 }

8> db.Studlist.find({"Place":"Kollam"},{fname:1,"Place":1,_id:0})

{ "fname" : "Suhail", "Place" : "Kollam" }

{ "fname" : "Sahal", "Place" : "Kollam" }

> db.Studlist.find({"Place":"Kollam"},{fname:1,phnno:1,Department:1,"Place":1,_id:0})

{ "fname" : "Suhail", "Department" : "Mechanical", "Place" : "Kollam", "phnno" : 9645820823 }

{ "fname" : "Sahal", "Department" : "Mechanical", "Place" : "Kollam", "phnno" : 9947291316 }

9> db.Studlist.find({$nor:[{"Place":"Kollam"},{"Place":"Thiruvananthapuram"}]},{_id:0})

{ "fname" : "Amina", "lname" : "Samad", "Gender" : "Female", "Department" : "MCA", "Mark" : 98, "Grade" : "A+", "Place" : "Ernakulam", "phnno" : 7510465620 }

{ "fname" : "Vahid", "lname" : "Sherif", "Gender" : "Male", "Department" : "MCA", "Mark" : 88, "Grade" : "A", "Place" : "Idukki", "phnno" : 9497487862 }

{ "fname" : "Vajid", "lname" : "Shein", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 86, "Grade" : "A", "Place" : "Banglore", "phnno" : 7611199447 }

{ "fname" : "Shahid", "lname" : "kareem", "Gender" : "Female", "Department" : "MCA", "Mark" : 86, "Grade" : "A", "Place" : "Kozhikode", "phnno" : 9744490953 }

{ "fname" : "Ashik", "lname" : "Basheer", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 83, "Grade" : "B", "Place" : "Thrissur", "phnno" : 7560883692 }

{ "fname" : "Arif", "lname" : "Mohd", "Gender" : "Male", "Department" : "Mechanical", "Mark" : 86, "Grade" : "A", "Place" : "Kasargode", "phnno" : 8301001102 }

10>db.Studlist.find({$or:[{"Place":"Kollam"},{"Place":"Thiruvananthapuram"}],Gender:"Female"},{_id:0})

{ "fname" : "Ansiya", "lname" : "Shajahan", "Gender" : "Female", "Department" : "MCA", "Mark" : 96, "Grade" : "A+", "Place" : "Thiruvananthapuram", "phnno" : 7510465620 }

{ "fname" : "Safa", "lname" : "Fathima", "Gender" : "Female", "Department" : "MCA", "Mark" : 100, "Grade" : "A+", "Place" : "Thiruvananthapuram", "phnno" : 9633334365 }