**ASSIGNMENT -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 the names of the top three 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 who does not belong to neither Kollam nor Thiruvananthapuram

10. Display all female students who belong to either Kollam or Thiruvananthapuram

**CODE**:

use college;  
switched to db college;

> db.createCollection("studlist");  
{ "ok" : 1 }

>db.studlist.insert({fname:"stefi",lname:"T",gender:"female",place:"kollam",dept:"mca",mark:"91",grade:"A",contact:"9946673258"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"sreelaya",lname:"vishal",gender:"female",place:"ernakulam",dept:"mca",mark:"89",grade:"A+",contact:"9867453622"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"sandhya",lname:"sanu",gender:"male",place:"trivandrum",dept:"mechanical",mark:"40",grade:"A",contact:"9756348950"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"sanoop",lname:"s",gender:"male",place:"kollam",dept:"mechanical",mark:"95",grade:"A+",contact:"954128740"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"anu",lname:"ashok",gender:"female",place:"idukki",dept:"mechanical",mark:"85",grade:"A",contact:"9784902124"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"vismaya",lname:"v",gender:"female",place:"thrissur",dept:"mca",mark:"99",grade:"A+",contact:"9865124785"});  
WriteResult({ "nInserted" : 1 })

>db.studlist.insert({fname:"vinaya",lname:"v",gender:"female",place:"trivandrum",dept:"mechanical",mark:"98",grade:"A+",contact:"9854874545"});  
WriteResult({ "nInserted" : 1 })

1. > db.studlist.find({gender:'female',dept:'mca'},{fname:1,lname:1})
2. > db.studlist.find().sort({"mark":-1}).limit(1)
3. >db.studlist.find({gender:'male',grade:'A+'},{fname:1,lname:1,gender:1,dept:1,loc:1,grade:1,mark:1})
4. > db.studlist.find({dept:"mechanical"}).sort({mark:-1}).limit(3)
5. >db.studlist.find({mark:{$gt:90},gender:'female'},{fname:1,lname:1,mark:1,contact:1,grade:1})
6. >db.studlist.find({$and:[{mark:{$gt:80}},{mark:{$lt:90}}]},{fname:1,lname:1,mark:1,contact:1,grade:1})
7. > db.studlist.find({fname:{$regex:'^v'}},{})
8. > db.studlist.find({place:"kollam"},{})
9. > db.studlist.find({$nor:[{place:"kollam"},{loc:"trivandrum"}]},{})
10. > db.studlist.find({$or:[{place:"kollam"},{loc:"trivandrum"}],gender:"female"},{})

**OUTPUT**:





