

# ASSIGNMENT – 1

## Mongo DB

By Yash Raj Sharma

### Find/Query Operation:

1. `db.students.find(  
 {department: "IT"}, {name: 1 , cgpa: 1}  
 )`
2. `db.students.find(  
 {cgpa: {$gte: 8.5}} , {roll_no: 1 ,name: 1 , department: 1}  
 )`
3. `db.students.find(  
 {  
 department: {$in: ["ECE","ME"]}  
 }  
 )`
4. `db.students.find(  
 {year: 4 , cgpa: {$gt: 8.0}},  
 {name:1 , cgpa: 1}  
 )`
5. `db.students.find( {$and : [{department: {$ne: "CSE"}}, {cgpa: {$lte: 7.5}}]} )`

## Sort / Pagination:

```
6. db.students.find(  
  {}  
).sort({cgpa: -1}).limit(3);
```

```
7. db.students.find(  
  {}  
).sort({cgpa: -1}).skip(3).limit(3);
```

## Update Operations:

```
8. db.students.updateMany(  
  {department: "CSE"},  
  {$inc: {cgpa: 0.2}}  
)
```

```
9. db.students.updateMany(  
  {cgpa: {$lt: 7.0}},  
  {$set: {department: "Probation"}}  
)
```

```
10. db.students.updateMany(  
  {department: "ME"},  
  {$unset: {email: ""}}  
)
```

## Bonus(Advanced):

```
11. db.students.updateMany(  
    {},  
    {$rename: {"cgpa": "gpa"}}  
)
```

```
12. db.students.replaceOne(  
    {roll_no: "CSE2104" },  
    {  
        roll_no: "CSE2104",  
        name: "Virat Kohli",  
        department: "CSE",  
        year: 3,  
        gpa: 8.5  
    }  
)
```