

ASSIGNMENT 1

Mongo DB

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Find / Query Operations:

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  
        }  
    )
```