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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
```

```
}
```

```
)
```