

**Name: Sanskruti Patil**

**Roll No: 31448**

### 1) CREATE

```
db.students.insertMany([
  {_id:1,name: "Sanskriti",age: 20, dept: "Computer",marks: 99},
  {_id:2,name: "Mokshada",age: 19, dept: "IT",marks: 98},
  {_id:3,name: "Sayali",age: 18, dept: "ENTC",marks: 97}
])
```

```
db.students.insertMany([
  {_id:4,name: "Ram",age: 20, dept: "IT",marks: 80},
  {_id:5,name: "Shivraj",age: 19, dept: "AIDS",marks: 59},
  {_id:6,name: "Henna",age: 18, dept: "ENTC",marks: 97}
])
```

Output:

```
{ "acknowledged" : true, "insertedIds" : [ 1, 2, 3 ] }
```

### 2) READ/ LOGICAL OPERATION (AND,OR,NOT)

```
db.students.find()
```

Output:

```
{ "_id" : 1, "name" : "Sanskriti", "age" : 20, "dept" : "Computer", "marks" : 99 }
{ "_id" : 2, "name" : "Mokshada", "age" : 19, "dept" : "IT", "marks" : 98 }
{ "_id" : 3, "name" : "Sayali", "age" : 18, "dept" : "ENTC", "marks" : 97 }
```

```
db.students.find({age:20})
```

Output:

```
{ "_id" : 1, "name" : "Sanskriti", "age" : 20, "dept" : "Computer", "marks" : 99 }
```

**// age >20 and marks>70**

```
db.students.find({$and: [{age: {$gt:20}}, {marks:{$gt:70}}]})
```

Output: (no records)

**// \$or : sIT or marks>80**

```
db.students.find({$or: [{dept: "IT"}, {marks:{$gte:80}}]})
```

Output:

```
{ "_id" : 1, "name" : "Sanskriti", "age" : 20, "dept" :
"Computer", "marks" : 99 }
{ "_id" : 2, "name" : "Mokshada", "age" : 19, "dept" : "IT",
"marks" : 98 }
{ "_id" : 3, "name" : "Sayali", "age" : 18, "dept" : "ENTC",
"marks" : 97 }
{ "_id" : 4, "name" : "Ram", "age" : 20, "dept" : "IT", "marks" :
80 }
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",
"marks" : 97 }
```

// **nor IT or marks<60**

```
db.students.find({$nor: [{dept: "IT"}, {marks: {$lte:60}}]})
```

```
{ "_id" : 1, "name" : "Sanskriti", "age" : 20, "dept" :
"Computer", "marks" : 99 }
{ "_id" : 3, "name" : "Sayali", "age" : 18, "dept" : "ENTC",
"marks" : 97 }
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",
"marks" : 97 }
```

### 3) UPDATE

#### 1] Update One

**before update:**

```
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",
"marks" : 97 }
```

**update:**

```
db.students.updateOne({_id:6},{ $set:{marks:90}})
```

Output

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" :
1 }
```

**after update:**

```
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",
"marks" : 90 }
```

#### 2] Update Many

**before update:**

```
db.students.find({dept:"ENTC"})
```

```
{ "_id" : 3, "name" : "Sayali", "age" : 18, "dept" : "ENTC", "marks" : 97 }
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",
"marks" : 90 }
```

**Update:**

```
db.students.updateMany({dept:"ENTC"},{$inc:{marks:5}})
```

**output**

```
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
```

**After Update**

```
db.students.find({dept:"ENTC"})
```

```
{ "_id" : 3, "name" : "Sayali", "age" : 18, "dept" : "ENTC", "marks" : 102 }
```

```
{ "_id" : 6, "name" : "Henna", "age" : 18, "dept" : "ENTC",  
"marks" : 95 }
```

**4) DELETE**1] Delete One

```
db.students.deleteOne({_id:3})
```

```
{ "acknowledged" : true, "deletedCount" : 1 }
```

2] Delete Many

```
db.students.deleteMany({dept:"IT"})
```

```
{ "acknowledged" : true, "deletedCount" : 2 }
```

```
db.students.find({dept:"IT"}) // no output
```

**5) SAVE(INSERT+UPDATE)**

```
db.students.save({_id:7,name:"Mayuri",dept:"Computer",marks:80})
```

```
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" :  
0, "_id" : 7 })
```

```
db.students.find({_id:7})
```

```
{ "_id" : 7, "name" : "Mayuri", "dept" : "Computer", "marks" :  
80 }
```

```
db.students.save({_id:7,name:"Mayuri",dept:"Computer",marks:90})
```

```
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1  
})
```

```
db.students.find({_id:7})
```

```
{ "_id" : 7, "name" : "Mayuri", "dept" : "Computer", "marks" :  
90 }
```

