

# Database Management System Laboratory

Name:-NISHA Assignment No:-9 Roll NO:-3334

admin1@admin1-HP-EliteDesk-800-G1-TWR:~\$ service mongod start

admin1@admin1-HP-EliteDesk-800-G1-TWR:~\$ mongo

MongoDB shell version v3.6.3

```
> db.createCollection("students")
```

```
{ "ok" : 1 }
```

```
> use students
```

```
switched to db students
```

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

```
> db.students.insert({name:"Mustafa",branch:"COMP",cgpa:9,nativeCity:"kota"})
```

```
WriteResult({ "nInserted" : 1 })
```

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

```
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",  
  "cgpa" : 9, "nativeCity" : "kota" }
```

```
> db.students.insert({name:"Pranay",branch:"IT",cgpa:8,nativeCity:"delhi"})
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.students.insert({name:"Rahul",branch:"COMP",cgpa:9,nativeCity:"Hyderabad"})
```

```
WriteResult({ "nInserted" : 1 })
```

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

```
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",  
  "cgpa" : 9, "nativeCity" : "kota" }
```

```
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"  
  : 8, "nativeCity" : "delhi" }
```

```
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"  
  : 9, "nativeCity" : "Hyderabad" }
```

```
> db.students.insert({name:"saurabh",branch:"ENTC",cgpa:10,nativeCity:"Bengaluru"})
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.students.insert({name:"Abhishek",branch:"MECH",cgpa:7,nativeCity:"jammu"})
```

```
WriteResult({ "nInserted" : 1 })
```

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

```
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",  
  "cgpa" : 9, "nativeCity" : "kota" }
```

```
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"  
  : 8, "nativeCity" : "delhi" }
```

```
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"  
  : 9, "nativeCity" : "Hyderabad" }
```

```
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",  
  "cgpa" : 10, "nativeCity" : "Bengaluru" }
```

```
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",  
  "cgpa" : 7, "nativeCity" : "jammu" }
```

```
> db.students.update({name:{ $eq:"Pranay"}},{ $set:{cgpa:10}})
```

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

```
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
  "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
  : 10, "nativeCity" : "delhi" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
  : 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
  "cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
  "cgpa" : 7, "nativeCity" : "jammu" }
```

```
> db.students.find({$or:[{cgpa:{$gt:9}},{branch:{$eq:"COMP"}}]})
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
  "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
  : 10, "nativeCity" : "delhi" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
  : 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
  "cgpa" : 10, "nativeCity" : "Bengaluru" }
```

```
> db.students.find({branch:{$not:{$eq:"IT"}}})
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
  "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
  : 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
  "cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
  "cgpa" : 7, "nativeCity" : "jammu" }
> db.students.update({name:{$eq:"Pranay"}},{set:{nativeCity:"Mumbai"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

```
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
  "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
  : 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
  : 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
  "cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
  "cgpa" : 7, "nativeCity" : "jammu" }
> db.students.update({name:{$eq:"Abhishek"}},{set:{nativeCity:"Mumbai"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

```
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
  "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
  : 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
```



```

: 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
"cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }
> db.students.find({$and:[{cgpa:{ $eq:7 }},{nativeCity:{ $eq:"Mumbai" } ]}})
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }

> db.students.find({$or:[{cgpa:{ $not:{ $gt:9 } }},{branch:{ $eq:"COMP" } } ]}})
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
"cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
: 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }

> db.students.find({$or:[{cgpa:{ $not:{ $eq:9 } }},{branch:{ $eq:"COMP" } } ]}})
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
"cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
: 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fe9e50aa71a8a62424c2"), "name" : "Rahul", "branch" : "COMP", "cgpa"
: 9, "nativeCity" : "Hyderabad" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
"cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }

> db.students.remove({name:"Rahul"})
WriteResult({ "nRemoved" : 1 })

> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
"cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
: 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
"cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }

> db.students.save({name:"Abhishek",branch:"MECH",cgpa:7,nativeCity:"jammu"})
WriteResult({ "nInserted" : 1 })

> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",
"cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
: 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
"cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("632a048f50aa71a8a62424c5"), "name" : "Abhishek", "branch" : "MECH",

```

```

"cgpa" : 7, "nativeCity" : "jammu" }
>
db.students.save({_id:"632a048f50aa71a8a62424c5",name:"Abhishek",branch:"IT",cgpa:7,nativeCity:"jammu"})
WriteResult({
  "nMatched" : 0,
  "nUpserted" : 1,
  "nModified" : 0,
  "_id" : "632a048f50aa71a8a62424c5"
})
>
db.students.save({_id:ObjectId("632a048f50aa71a8a62424c5"),name:"Abhishek",branch:"IT",cgpa:7,nativeCity:"jammu"})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP", "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa" : 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC", "cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH", "cgpa" : 7, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("632a048f50aa71a8a62424c5"), "name" : "Abhishek", "branch" : "IT", "cgpa" : 7, "nativeCity" : "jammu" }
{ "_id" : "632a048f50aa71a8a62424c5", "name" : "Abhishek", "branch" : "IT", "cgpa" : 7, "nativeCity" : "jammu" }
> db.students.save({_id:3358,name:"Ankush",branch:"COMP",cgpa:8,nativeCity:"Bengaluru"})
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 3358 })
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP", "cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa" : 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC", "cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH", "cgpa" : 7, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("632a048f50aa71a8a62424c5"), "name" : "Abhishek", "branch" : "IT", "cgpa" : 7, "nativeCity" : "jammu" }
{ "_id" : "632a048f50aa71a8a62424c5", "name" : "Abhishek", "branch" : "IT", "cgpa" : 7, "nativeCity" : "jammu" }
{ "_id" : 3358, "name" : "Ankush", "branch" : "COMP", "cgpa" : 8, "nativeCity" : "Bengaluru" }
> db.students.save({_id:3358,name:"Rishabh"})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.students.find()
{ "_id" : ObjectId("6329fe6150aa71a8a62424c0"), "name" : "Mustafa", "branch" : "COMP",

```

```
"cgpa" : 9, "nativeCity" : "kota" }
{ "_id" : ObjectId("6329fe7f50aa71a8a62424c1"), "name" : "Pranay", "branch" : "IT", "cgpa"
: 10, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("6329fecc50aa71a8a62424c3"), "name" : "saurabh", "branch" : "ENTC",
"cgpa" : 10, "nativeCity" : "Bengaluru" }
{ "_id" : ObjectId("6329fef250aa71a8a62424c4"), "name" : "Abhishek", "branch" : "MECH",
"cgpa" : 7, "nativeCity" : "Mumbai" }
{ "_id" : ObjectId("632a048f50aa71a8a62424c5"), "name" : "Abhishek", "branch" : "IT",
"cgpa" : 7, "nativeCity" : "jammu" }
{ "_id" : "632a048f50aa71a8a62424c5", "name" : "Abhishek", "branch" : "IT", "cgpa" : 7,
"nativeCity" : "jammu" }
{ "_id" : 3358, "name" : "Rishabh" }
```