PRANAV S SASTRY

1BM19CS228

BDA Lab 3

```
> use 19cs228
switched to db 19cs228
>
```

```
> db
19cs228
```

```
> db.createCollection("Student")
{ "ok" : 1 }
>
```

```
> db.Student.update({_id:1,name:"James Bond",grade:6},{$set:{hobbies:"Dancing"}}
,{upsert:true})
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 1 })
```

```
> db.Student.find({name:"Pranav"})
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
>
```

```
> db.Student.find({},{name:1,grade:1,_id:0})
{ "name" : "Pranav", "grade" : 4 }
{ "grade" : 6, "name" : "James Bond" }
>
```

```
> db.Student.find({grade:{$eq:4}})
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
>
```

```
> db.Student.find({hobbies:{$in:['SoftDev','Dancing']}})
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Dancing" }
>
```

```
> db.Student.find({name:/av$/})
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
>
```

```
> db.Student.find({name:/^(R|M)/})
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
>
```

```
> db.Student.count()
4
>
```

```
> db.Student.find().sort({name:-1})
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Dancing" }
>
```

```
> db.Student.save({name:"Modric",grade:10,hobbies:"Magic"})
WriteResult({ "nInserted" : 1 })
> db.Student
19cs228.Student
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Dancing" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
```

```
> db.Student.update({_id:1},{$set:{hobbies:"Spying"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "SoftDev" }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
```

```
> db.Student.update({name:"Pranav"},{$unset:{hobbies:""}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4 }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
```

```
> db.Student.find({_id:2},{name:1})
{ "_id" : 2, "name" : "Ronaldo" }
>
```

```
> db.Student.find({grade:{$ne:4}})
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
```

```
> db.Student.find({name:/o$/})
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
>
```

```
> db.Student.update({_id:0},{$set:{hobbies:"Tweeting"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : "Tweeting" }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
>
```

```
> db.Student.update({_id:0},{$set:{hobbies:null}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : null }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
>
```

```
> db.Student.count()
5
```

```
> db.Student.count({hobbies:'Football'})
2
> db.Student.find()
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : null }
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
  "hobbies" : "Magic" }
```

```
> db.Student.find({hobbies:'Football'}).limit(1)
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
```

```
> db.Student.find().sort({name:1})
{ "_id" : 1, "grade" : 6, "name" : "James Bond", "hobbies" : "Spying" }
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
 "hobbies" : "Magic" }
{ "_id" : 0, "name" : "Pranav", "grade" : 4, "hobbies" : null }
{ "_id" : 2, "name" : "Ronaldo", "grade" : 8, "hobbies" : "Football" }
```

```
> db.Student.find().skip(3)
{ "_id" : 3, "name" : "Messi", "grade" : 5, "hobbies" : "Football" }
{ "_id" : ObjectId("62569575be2964c58685f6d1"), "name" : "Modric", "grade" : 10,
 "hobbies" : "Magic" }
>
```

```
> db.Food.find({fruits:['berry','apple']})
> db.Food.find({fruits:['apple','berry']})
{ "_id" : 1, "fruits" : [ "apple", "berry" ] }
>
```

```
> db.Food.find({'fruits.1':'apple'})
> db.Food.find({'fruits.0':'apple'})
{ "_id" : 0, "fruits" : [ "apple", "mango" ] }
{ "_id" : 1, "fruits" : [ "apple", "berry" ] }
>
```

```
> db.Food.find({fruits:{$size:2}})
{ "_id" : 0, "fruits" : [ "apple", "mango" ] }
{ "_id" : 1, "fruits" : [ "apple", "berry" ] }
{ "_id" : 2, "fruits" : [ "pineapple", "berry" ] }
>
```

```
> db.Food.find({_id:0},{fruits:{$slice:2}})
{ "_id" : 0, "fruits" : [ "apple", "mango" ] }
>
```

```
> db.Food.find({fruits:{$all:['mango','berry']}})
> db.Food.find({fruits:{$all:['apple','berry']}})
{ "_id" : 1, "fruits" : [ "apple", "berry" ] }
>
```

```
> db.Food.update({_id:0},{$push:{fruits:["Pineapple","Apple"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```