**C:\windows\system32>cd C:\Program Files\MongoDB\Server\4.0\bin**

**Start MongoDB Server**

C:\Program Files\MongoDB\Server\4.0\bin>**net start mongodb**

The requested service has already been started.

More help is available by typing NET HELPMSG 2182.

C:\Program Files\MongoDB\Server\4.0\bin>**mongo**

MongoDB shell version v4.0.11

connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb

Implicit session: session { "id" : UUID("eb23acfe-e979-4c5a-8a61-812179b95122") }

MongoDB server version: 4.0.11

Welcome to the MongoDB shell.

………..

To enable free monitoring, run the following command: db.enableFreeMonitoring()

To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

**Show Databases**

> show databases;

admin 0.000GB

becomps 0.000GB

config 0.000GB

local 0.000GB

**Switch to a Particular Database**

> use becomps;

switched to db becomps

**Show Collections of Database**

> show collections;

student

**Create Collection**

> db.createCollection("project");

{ "ok" : 1 }

**Insert Into Collection**

> db.project.insert({id:1,prjctname:"DNSSEC",p\_domain:"security"});

WriteResult({ "nInserted" : 1 })

**To Display all the contents of the Collection**

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

**Insert**

> db.project.insert({\_id:2,prjctname:"splunk",p\_domain:"security"});

WriteResult({ "nInserted" : 1 })

**a. Insert - having Id in Collection(Duplicate Key Error)**

> db.project.insert({\_id:2,prjctname:"splunk",p\_domain:"security"});

WriteResult({

"nInserted" : 0,

"writeError" : {

"code" : 11000,

"errmsg" : "E11000 duplicate key error collection: becomps.project index: \_id\_ dup key: { : 2.0 }"

}

})

**b. Insert – Not having Id in Collection(Auto Id is generated)**

> db.project.insert({prjctname:"splunk",p\_domain:"security"});

WriteResult({ "nInserted" : 1 })

> **db.project.find();**

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

**c. Insert – Id doesn’t exists in Collection(Insert)**

> db.project.insert({\_id:1,prjctname:"ehrms"});

WriteResult({ "nInserted" : 1 })

**> db.project.find();**

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "elk", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

**Save**

**a.Having Id in Collection(Update)**

> db.project.save({\_id:2,prjctname:"elk",p\_domain:"system security"});

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

> **db.project.find();**

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "elk", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

**b.Not having Id in Collection(Insert)**

> db.project.save({prjctname:"nic",p\_domain:"app"});

WriteResult({ "nInserted" : 1 })

> **db.project.find();**

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "elk", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

**c. Id doesn’t exists in Collection(Insert)**

> db.project.save({\_id:3,prjctname:"nic",p\_domain:"app\_development"});

WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "\_id" : 3 })

> **db.project.find();**

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "elk", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

**Update**

**a.upsert(true) and id matches**

> db.project.update({\_id:2},{$set:{prjctname:"abc"}},{upsert:true});

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

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

**b.upsert(true) and no id matches(Insert new document)**

> db.project.update({\_id:4},{$set:{prjctname:"abc"}},{upsert:true});

WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "\_id" : 4 })

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

{ "\_id" : 4, "prjctname" : "abc" }

**c.upsert(false) and no Id matches(No change)**

> db.project.update({\_id:5},{$set:{prjctname:"abc"}});

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

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

{ "\_id" : 4, "prjctname" : "abc" }

**d.upsert(false) and Id matches(Update)**

> db.project.update({\_id:4},{$set:{prjctname:"pqr"}});

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

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "DNSSEC", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

{ "\_id" : 4, "prjctname" : "pqr" }

**e.multi(true)**

**//wherever the match is found that particular rows are updated**

> db.project.update({id:1},{$set:{prjctname:"Multi"}},{multi:true});

WriteResult({ "nMatched" : 2, "nUpserted" : 0, "nModified" : 2 })

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "Multi", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "Multi", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

{ "\_id" : 4, "prjctname" : "pqr" }

**f.multi(false)**

> db.project.update({id:1},{$set:{prjctname:"Multi false"}},{multi:false});

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

> db.project.find();

{ "\_id" : ObjectId("5d3e7e1e0f86bf80dd0841d7"), "id" : 1, "prjctname" : "Multi false", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e7eaf0f86bf80dd0841d8"), "id" : 1, "prjctname" : "Multi", "p\_domain" : "security" }

{ "\_id" : 2, "prjctname" : "abc", "p\_domain" : "system security" }

{ "\_id" : ObjectId("5d3e802d0f86bf80dd0841d9"), "prjctname" : "splunk", "p\_domain" : "security" }

{ "\_id" : ObjectId("5d3e80fa0f86bf80dd0841da"), "prjctname" : "nic", "p\_domain" : "app" }

{ "\_id" : 3, "prjctname" : "nic", "p\_domain" : "app\_development" }

{ "\_id" : 1, "prjctname" : "ehrms" }

{ "\_id" : 4, "prjctname" : "pqr" }

**Remove**

**a. With condition**

> db.student.find();

{ "\_id" : ObjectId("5d3e7c452192d5bcdb2bfdbf"), "roll\_no" : 1, "sname" : "zoya" }

{ "\_id" : ObjectId("5d3e7cd52192d5bcdb2bfdc0"), "roll\_no" : 2, "sname" : "Taniya", "dob" : "22-nov-1998" }

> db.student.remove({roll\_no:1});

WriteResult({ "nRemoved" : 1 })

> db.student.find();

{ "\_id" : ObjectId("5d3e7cd52192d5bcdb2bfdc0"), "roll\_no" : 2, "sname" : "Taniya", "dob" : "22-nov-1998" }

**b. Without condition**

> db.student.remove({});

WriteResult({ "nRemoved" : 1 })

**STRING MATCHING**

**a.Start from ‘P’**

> db.student.find({s\_name:/^P/});

{ "\_id" : 1, "roll\_no" : "s1", "s\_name" : "Pranali" }

**b. Ends with a**

> db.student.find({s\_name:/a$/});

{ "\_id" : 2, "roll\_no" : "s2", "s\_name" : "Taniya" }

**c. Has n in between**

> db.student.find({s\_name:/n/});

{ "\_id" : 1, "roll\_no" : "s1", "s\_name" : "Pranali" }

{ "\_id" : 2, "roll\_no" : "s2", "s\_name" : "Taniya" }

> db.becomp.find({sname:/z/});

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**NEW DATABASE:**

**> db.becomp.find();**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**$eq :**

**> db.becomp.find({sub2:{$eq:"csal"}});**

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**$ne :**

**> db.becomp.find({sub1:{$ne:"bda"}});**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**$gt :**

**> db.becomp.find({\_id:{$gt:4}});**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**$gte :**

**> db.becomp.find({\_id:{$gte:3}});**

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**$lt :**

**> db.becomp.find({\_id:{$lt:3}});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

**$lte :**

**> db.becomp.find({\_id:{$lte:3}});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

**$in :**

**> db.becomp.find({sub1:{$in:['bda']}});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

**$nin :**

**> db.becomp.find({sub1:{$nin:['bda']}});**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**AND**

**> db.becomp.find({$and:[{\_id:1},{\_id:3}]}); // no output**

**> db.becomp.find({$and:[{sub1:"assdf"},{sub2:"csal"}]});**

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : "csal" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**> db.becomp.find({$and:[{sub1:"assdf"},{sub2:"mis"}]});**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

**OR**

**> db.becomp.find({$or:[{sub1:"assdf"},{sub2:"csal"}]});**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : "csal" }

**null :**

**> db.becomp.update({\_id:6,\_id:7},{$set:{sub2:null}});**

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

**> db.becomp.find({sub2:{$eq:null}});**

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**count :**

**> db.becomp.count();**

7

**> db.becomp.count({sub1:"bda"});**

4

**> db.becomp.count({sub2:{$eq:"mis"}});**

5

**> db.becomp.count({sub1:{$eq:"assdf"}});**

3

**Count null :**

**> db.becomp.count({sub2:null});**

2

**> db.becomp.count({sub2:{$eq:null}});**

2

**limit :**

**> db.becomp.find().limit(2);**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

**skip :**

**> db.becomp.find().skip(4);**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**sort :**

**Ascending**

**> db.becomp.find().sort({sname:1});**

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

**> db.becomp.find().sort({\_id:1});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**Descending**

**> db.becomp.find().sort({sname:-1});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

**> db.becomp.find().sort({\_id:-1});**

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

**> db.becomp.find().sort({\_id:1}).limit(4);**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

**> db.becomp.find().sort({\_id:1}).skip(4);**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**> db.becomp.find().sort({\_id:1,sname:-1});**

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**> db.becomp.find().sort({\_id:-1,sname:1});**

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 4, "sname" : "pranali", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 3, "sname" : "nazmeen", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 2, "sname" : "taniya", "sub1" : "bda", "sub2" : "mis" }

{ "\_id" : 1, "sname" : "zoya", "sub1" : "bda", "sub2" : "mis" }

Last 2 records:

**> db.becomp.find().skip(db.becomp.count()-2);**

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

Last 3 records:

**> db.becomp.find().skip(db.becomp.count()-3);**

{ "\_id" : 5, "sname" : "haamid", "sub1" : "assdf", "sub2" : "mis" }

{ "\_id" : 6, "sname" : "ayesha", "sub1" : "assdf", "sub2" : null }

{ "\_id" : 7, "sname" : "nuzhat", "sub1" : "assdf", "sub2" : null }

**Arrays:**

**> db.food.insert({\_id:1,fruits:['apple','mango','orange']});**

WriteResult({ "nInserted" : 1 })

**> db.food.insert({\_id:2,fruits:['apple','mango','orange','banana']});**

WriteResult({ "nInserted" : 1 })

**> db.food.insert({\_id:3,fruits:['apple','orange']});**

WriteResult({ "nInserted" : 1 })

**> db.food.insert({\_id:4,fruits:['mango','orange']});**

WriteResult({ "nInserted" : 1 })

**> db.food.find();**

{ "\_id" : 1, "fruits" : [ "apple", "mango", "orange" ] }

{ "\_id" : 2, "fruits" : [ "apple", "mango", "orange", "banana" ] }

{ "\_id" : 3, "fruits" : [ "apple", "orange" ] }

{ "\_id" : 4, "fruits" : [ "mango", "orange" ] }

**> db.food.find({fruits:"apple"});**

{ "\_id" : 1, "fruits" : [ "apple", "mango", "orange" ] }

{ "\_id" : 2, "fruits" : [ "apple", "mango", "orange", "banana" ] }

{ "\_id" : 3, "fruits" : [ "apple", "orange" ] }

**> db.food.find({fruits:"apple",fruits:"orange"});**

{ "\_id" : 1, "fruits" : [ "apple", "mango", "orange" ] }

{ "\_id" : 2, "fruits" : [ "apple", "mango", "orange", "banana" ] }

{ "\_id" : 3, "fruits" : [ "apple", "orange" ] }

{ "\_id" : 4, "fruits" : [ "mango", "orange" ] }

**> db.food.find({'fruits.1':"apple"}); // no match**

**> db.food.find({'fruits.1':"mango"});**

{ "\_id" : 1, "fruits" : [ "apple", "mango", "orange" ] }

{ "\_id" : 2, "fruits" : [ "apple", "mango", "orange", "banana" ] }

**> db.food.find({'fruits.0':"mango"});**

{ "\_id" : 4, "fruits" : [ "mango", "orange" ] }

**> db.food.find({'fruits.2':"orange"});**

{ "\_id" : 1, "fruits" : [ "apple", "mango", "orange" ] }

{ "\_id" : 2, "fruits" : [ "apple", "mango", "orange", "banana" ] }

**size of array :**

**> db.food.find({'fruits':{$size:2}});**

{ "\_id" : 3, "fruits" : [ "apple", "orange" ] }

{ "\_id" : 4, "fruits" : [ "mango", "orange" ] }

**slice :**

**> db.food.find({\_id:2},{fruits:{$slice:2}});**

{ "\_id" : 2, "fruits" : [ "apple", "mango" ] }

**> db.food.find({\_id:1},{fruits:{$slice:1}});**

{ "\_id" : 1, "fruits" : [ "apple" ] }

**Update index values in array :**

**db.food.update({\_id:2},{$set:{'fruits.1':'plum'}});**

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

**> db.food.update({\_id:2},{$set:{'fruits.0':'Blueberries'}});**

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

**> db.food.find({\_id:2});**

{ "\_id" : 2, "fruits" : [ "Blueberries", "plum", "orange", "banana" ] }