***// CRUD***

> db.students.insert({roll:12,name:'durvesh',city:'nashik'})

WriteResult({ "nInserted" : 1 })

> db.students.insertMany([{roll:12,name:'durvesh',city:'nashik'},{roll:15,name:'atharva',city:'pune'},{roll:18,name:'aditi',city:'pune'},{roll:21,name:'divyank',city:'aurangabad'},{roll:24,name:'eesha',city:'pune'}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("5f8fd31299f85e62679c797b"),

ObjectId("5f8fd31299f85e62679c797c"),

ObjectId("5f8fd31299f85e62679c797d"),

ObjectId("5f8fd31299f85e62679c797e"),

ObjectId("5f8fd31299f85e62679c797f")

]

}

> db.students.find()

{ "\_id" : ObjectId("5f8fd24c99f85e62679c797a"), "roll" : 12, "name" : "durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797b"), "roll" : 12, "name" : "durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797c"), "roll" : 15, "name" : "atharva", "city" : "pune" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797d"), "roll" : 18, "name" : "aditi", "city" : "pune" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797e"), "roll" : 21, "name" : "divyank", "city" : "aurangabad" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797f"), "roll" : 24, "name" : "eesha", "city" : "pune" }

>

>

>

> db.students.update({roll:12},{$set:{name:'Durvesh'}})

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

> db.students.find()

{ "\_id" : ObjectId("5f8fd24c99f85e62679c797a"), "roll" : 12, "name" : "Durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797b"), "roll" : 12, "name" : "durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797c"), "roll" : 15, "name" : "atharva", "city" : "pune" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797d"), "roll" : 18, "name" : "aditi", "city" : "pune" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797e"), "roll" : 21, "name" : "divyank", "city" : "aurangabad" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797f"), "roll" : 24, "name" : "eesha", "city" : "pune" }

> db.students.updateMany({city:'pune'},{$set:{city:'PUNE'}})

{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 3 }

> db.students.find()

{ "\_id" : ObjectId("5f8fd24c99f85e62679c797a"), "roll" : 12, "name" : "Durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797b"), "roll" : 12, "name" : "durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797c"), "roll" : 15, "name" : "atharva", "city" : "PUNE" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797d"), "roll" : 18, "name" : "aditi", "city" : "PUNE" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797e"), "roll" : 21, "name" : "divyank", "city" : "aurangabad" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797f"), "roll" : 24, "name" : "eesha", "city" : "PUNE" }

> db.students.remove({roll:{$gt:18}})

WriteResult({ "nRemoved" : 2 })

> db.students.find()

{ "\_id" : ObjectId("5f8fd24c99f85e62679c797a"), "roll" : 12, "name" : "Durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797b"), "roll" : 12, "name" : "durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797c"), "roll" : 15, "name" : "atharva", "city" : "PUNE" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797d"), "roll" : 18, "name" : "aditi", "city" : "PUNE" }

> db.students.remove({name:'durvesh'})

WriteResult({ "nRemoved" : 1 })

> db.students.find()

{ "\_id" : ObjectId("5f8fd24c99f85e62679c797a"), "roll" : 12, "name" : "Durvesh", "city" : "nashik" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797c"), "roll" : 15, "name" : "atharva", "city" : "PUNE" }

{ "\_id" : ObjectId("5f8fd31299f85e62679c797d"), "roll" : 18, "name" : "aditi", "city" : "PUNE" }

***//Comparison Operators***

> db.employees2.insertMany([{name:'a',city:'vellore',salary:10000},{name:'b',city:'mumbai',salary:10000},{name:'c',city:'vellore',salary:100000},{name:'d',city:'mumbai',salary:30000},{name:'e',city:'delhi',salary:300000}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("5f8fe04165e78575f2b130d2"),

ObjectId("5f8fe04165e78575f2b130d3"),

ObjectId("5f8fe04165e78575f2b130d4"),

ObjectId("5f8fe04165e78575f2b130d5"),

ObjectId("5f8fe04165e78575f2b130d6")

]

}

> db.employees2.find()

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d3"), "name" : "b", "city" : "mumbai", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d5"), "name" : "d", "city" : "mumbai", "salary" : 30000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d6"), "name" : "e", "city" : "delhi", "salary" : 300000 }

>

> db.employees2.find({salary:{$eq:10000}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d3"), "name" : "b", "city" : "mumbai", "salary" : 10000 }

> db.employees2.find({city:{$eq:'vellore'}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

> db.employees2.find({salary:{$gte:100000}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d6"), "name" : "e", "city" : "delhi", "salary" : 300000 }

> db.employees2.find({city:{$in:['vellore','mumbai']}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d3"), "name" : "b", "city" : "mumbai", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d5"), "name" : "d", "city" : "mumbai", "salary" : 30000 }

> db.employees2.find({salary:{$lt:50000}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d3"), "name" : "b", "city" : "mumbai", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d5"), "name" : "d", "city" : "mumbai", "salary" : 30000 }

> db.employees2.find({city:{$ne:'delhi'}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d3"), "name" : "b", "city" : "mumbai", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d5"), "name" : "d", "city" : "mumbai", "salary" : 30000 }

> db.employees2.find({city:{$nin:['delhi','mumbai']}})

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d2"), "name" : "a", "city" : "vellore", "salary" : 10000 }

{ "\_id" : ObjectId("5f8fe04165e78575f2b130d4"), "name" : "c", "city" : "vellore", "salary" : 100000 }

>

***// Logical Operators***

> db.employees.insertMany([{name:'jitendra',country:'india',salary:20000},{name:'jinesh',country:'india',salary:5000},{name:'dinesh',country:'india',salary:30000}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("5f8fdb0865e78575f2b130cc"),

ObjectId("5f8fdb0865e78575f2b130cd"),

ObjectId("5f8fdb0865e78575f2b130ce")

]

}

> db.employees.insertMany([{name:'dinanath',country:'USA',salary:2000000},{name:'jignesh',country:'UK',salary:509000},{name:'mark',country:'Kenya',salary:2000}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("5f8fdb8665e78575f2b130cf"),

ObjectId("5f8fdb8665e78575f2b130d0"),

ObjectId("5f8fdb8665e78575f2b130d1")

]

}

> db.employees.find()

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130cc"), "name" : "jitendra", "country" : "india", "salary" : 20000 }

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130cd"), "name" : "jinesh", "country" : "india", "salary" : 5000 }

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130ce"), "name" : "dinesh", "country" : "india", "salary" : 30000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130cf"), "name" : "dinanath", "country" : "USA", "salary" : 2000000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d0"), "name" : "jignesh", "country" : "UK", "salary" : 509000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d1"), "name" : "mark", "country" : "Kenya", "salary" : 2000 }

> db.employees.find({$and:[{salary:{$gt:10000}},{country:'india'}]})

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130cc"), "name" : "jitendra", "country" : "india", "salary" : 20000 }

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130ce"), "name" : "dinesh", "country" : "india", "salary" : 30000 }

> db.employees.find({$or:[{salary:{$gt:20000}},{country:'india'}]})

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130cc"), "name" : "jitendra", "country" : "india", "salary" : 20000 }

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130cd"), "name" : "jinesh", "country" : "india", "salary" : 5000 }

{ "\_id" : ObjectId("5f8fdb0865e78575f2b130ce"), "name" : "dinesh", "country" : "india", "salary" : 30000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130cf"), "name" : "dinanath", "country" : "USA", "salary" : 2000000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d0"), "name" : "jignesh", "country" : "UK", "salary" : 509000 }

> db.employees.find({$and:[{salary:{$gt:50000}},{country:{$not: {$eq:'india'}}}]})

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130cf"), "name" : "dinanath", "country" : "USA", "salary" : 2000000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d0"), "name" : "jignesh", "country" : "UK", "salary" : 509000 }

> db.employees.find({country:{$not: {$eq:'india'}}})

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130cf"), "name" : "dinanath", "country" : "USA", "salary" : 2000000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d0"), "name" : "jignesh", "country" : "UK", "salary" : 509000 }

{ "\_id" : ObjectId("5f8fdb8665e78575f2b130d1"), "name" : "mark", "country" : "Kenya", "salary" : 2000 }

***// Outputs***







