> use my\_first\_db

switched to db my\_first\_db

> db.createCollection("students")

{ "ok" : 1 }

> db.students.insert({name: "Name1", home\_state: "California", lucky\_number: 1, birthday: { month: "January", day: 1, year: 2000}})

WriteResult({ "nInserted" : 1 })

> db.students.insert({name: "Name2", home\_state: "California", lucky\_number: 3, birthday: { month: "February", day: 2, year: 2001}})

WriteResult({ "nInserted" : 1 })

> db.students.insert({name: "Name3", home\_state: "California", lucky\_number: 6, birthday: { month: "March", day: 3, year: 2002}})

WriteResult({ "nInserted" : 1 })

> db.students.insert({name: "Name4", home\_state: "Washington", lucky\_number: 9, birthday: { month: "April", day: 4, year: 2003}})

WriteResult({ "nInserted" : 1 })

> db.students.insert({name: "Name5", home\_state: "Washington", lucky\_number: 12, birthday: { month: "May", day: 5, year: 2004}})

WriteResult({ "nInserted" : 1 })

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

}

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

}

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

}

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

}

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

}

}

> db.students.find({home\_state: "California"}).pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

}

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

}

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

}

}

> db.students.find({lucky\_number: {$gt: 3}}).pretty()

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

}

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

}

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

}

}

> db.students.find({lucky\_number: {$lte: 10}}).pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

}

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

}

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

}

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

}

}

> db.students.find({$and: [{lucky\_number: {$gte: 1}}, {lucky\_number: {$lte: 9}}]}).pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

}

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

}

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

}

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

}

}

> db.students.updateMany({}, {$set: {interests: ["coding", "brunch", "MongoDB"]}})

{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 5 }

> db.students.find()

{ "\_id" : ObjectId("62ca9daf886176cbd2eb9a23"), "name" : "Name1", "home\_state" : "California", "lucky\_number" : 1, "birthday" : { "month" : "January", "day" : 1, "year" : 2000 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"), "name" : "Name2", "home\_state" : "California", "lucky\_number" : 3, "birthday" : { "month" : "February", "day" : 2, "year" : 2001 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9df3886176cbd2eb9a25"), "name" : "Name3", "home\_state" : "California", "lucky\_number" : 6, "birthday" : { "month" : "March", "day" : 3, "year" : 2002 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9e19886176cbd2eb9a26"), "name" : "Name4", "home\_state" : "Washington", "lucky\_number" : 9, "birthday" : { "month" : "April", "day" : 4, "year" : 2003 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"), "name" : "Name5", "home\_state" : "Washington", "lucky\_number" : 12, "birthday" : { "month" : "May", "day" : 5, "year" : 2004 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

> db.students.update({name: "Name1"}, {$push: {interests: 'interest1'}})

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

> db.students.find()

{ "\_id" : ObjectId("62ca9daf886176cbd2eb9a23"), "name" : "Name1", "home\_state" : "California", "lucky\_number" : 1, "birthday" : { "month" : "January", "day" : 1, "year" : 2000 }, "interests" : [ "coding", "brunch", "MongoDB", "interest1" ] }

{ "\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"), "name" : "Name2", "home\_state" : "California", "lucky\_number" : 3, "birthday" : { "month" : "February", "day" : 2, "year" : 2001 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9df3886176cbd2eb9a25"), "name" : "Name3", "home\_state" : "California", "lucky\_number" : 6, "birthday" : { "month" : "March", "day" : 3, "year" : 2002 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9e19886176cbd2eb9a26"), "name" : "Name4", "home\_state" : "Washington", "lucky\_number" : 9, "birthday" : { "month" : "April", "day" : 4, "year" : 2003 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

{ "\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"), "name" : "Name5", "home\_state" : "Washington", "lucky\_number" : 12, "birthday" : { "month" : "May", "day" : 5, "year" : 2004 }, "interests" : [ "coding", "brunch", "MongoDB" ] }

> db.students.update({name: "Name2"}, {$push: {interests: 'interest2'}})

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

> db.students.update({name: "Name3"}, {$push: {interests: 'interest3'}})

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

> db.students.update({name: "Name4"}, {$push: {interests: 'interest4'}})

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

> db.students.update({name: "Name5"}, {$push: {interests: 'interest5'}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest1"

]

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest2"

]

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest3"

]

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest4"

]

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest5"

]

}

> db.students.update({name: "Name5"}, {$push: {interests: 'taxes'}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest1"

]

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest2"

]

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest3"

]

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest4"

]

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest5",

"taxes"

]

}

> db.students.update({name: "Name5"}, {$pop: {interests: 1}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9daf886176cbd2eb9a23"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest1"

]

}

{

"\_id" : ObjectId("62ca9ddb886176cbd2eb9a24"),

"name" : "Name2",

"home\_state" : "California",

"lucky\_number" : 3,

"birthday" : {

"month" : "February",

"day" : 2,

"year" : 2001

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest2"

]

}

{

"\_id" : ObjectId("62ca9df3886176cbd2eb9a25"),

"name" : "Name3",

"home\_state" : "California",

"lucky\_number" : 6,

"birthday" : {

"month" : "March",

"day" : 3,

"year" : 2002

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest3"

]

}

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest4"

]

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest5"

]

}

> db.students.remove({home\_state: "California"})

WriteResult({ "nRemoved" : 3 })

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9e19886176cbd2eb9a26"),

"name" : "Name4",

"home\_state" : "Washington",

"lucky\_number" : 9,

"birthday" : {

"month" : "April",

"day" : 4,

"year" : 2003

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest4"

]

}

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest5"

]

}

> db.students.remove({name: "Name4"})

WriteResult({ "nRemoved" : 1 })

> db.students.find().pretty()

{

"\_id" : ObjectId("62ca9e2f886176cbd2eb9a27"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"interests" : [

"coding",

"brunch",

"MongoDB",

"interest5"

]

}

> db.students.remove({lucky\_number: {$gt: 5}})

WriteResult({ "nRemoved" : 1 })

> db.students.find().pretty()

> db.students.insert({name: "Name1", home\_state: "California", lucky\_number: 1, birthday: { month: "January", day: 1, year: 2000}})

WriteResult({ "nInserted" : 1 })

> db.students.insert({}, {$set: {number\_of\_belts: 0}})

WriteResult({ "nInserted" : 1 })

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

}

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

> db.students.update({}, {$set: {number\_of\_belts: 0}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"number\_of\_belts" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

> db.students.insert({name: "Name5", home\_state: "Washington", lucky\_number: 12, birthday: { month: "May", day: 5, year: 2004}})

WriteResult({ "nInserted" : 1 })

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"number\_of\_belts" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

{

"\_id" : ObjectId("62caa7f24958ed535f2a268c"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

}

}

> db.students.update({name: "Name5"}, {$set: {number\_of\_belts: 0}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"number\_of\_belts" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

{

"\_id" : ObjectId("62caa7f24958ed535f2a268c"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"number\_of\_belts" : 0

}

> db.students.update({home\_state: "Washington"}, {$inc: {number\_of\_belts: +1}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"number\_of\_belts" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

{

"\_id" : ObjectId("62caa7f24958ed535f2a268c"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"number\_of\_belts" : 1

}

> db.students.update({}, {$rename: {"number\_of\_belts": "belts\_earned"}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"belts\_earned" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

{

"\_id" : ObjectId("62caa7f24958ed535f2a268c"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"number\_of\_belts" : 1

}

> db.students.update({\_id: ObjectId("62caa7f24958ed535f2a268c")}, {$rename: {"number\_of\_belts": "belts\_earned"}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caa7784958ed535f2a268a"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"belts\_earned" : 0

}

{ "\_id" : ObjectId("62caa7ae4958ed535f2a268b") }

{

"\_id" : ObjectId("62caa7f24958ed535f2a268c"),

"name" : "Name5",

"home\_state" : "Washington",

"lucky\_number" : 12,

"birthday" : {

"month" : "May",

"day" : 5,

"year" : 2004

},

"belts\_earned" : 1

}

> db.students.insert({name: "Name1", home\_state: "California", lucky\_number: 1, birthday: { month: "January", day: 1, year: 2000}})

WriteResult({ "nInserted" : 1 })

> db.students.update({}, {$set: {updated\_on: new Date()}})

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

> db.students.find().pretty()

{

"\_id" : ObjectId("62caba1a4958ed535f2a268d"),

"name" : "Name1",

"home\_state" : "California",

"lucky\_number" : 1,

"birthday" : {

"month" : "January",

"day" : 1,

"year" : 2000

},

"updated\_on" : ISODate("2022-07-10T11:43:05.474Z")

}