1) mongoimport --db iti --collection zips --file Documents/zips.json

2) db.zips.find({state: "NY"}).pretty()

3) db.zips.find({pop: {$gte:1000}}).pretty()

4) db.zips.updateMany({$or: [{state: "PA"},{ state: "VA"}]}, {$set: {check: true}})

{ "acknowledged" : true, "matchedCount" : 2274, "modifiedCount" : 2274 }

db.zips.updateMany({state: {$in: ["PA", "VA"]}}, {$set: {check: true}})

5) db.zips.find({loc:{$gt:55,$lt:65}}, {pop:1, \_id:0})

6) > db.zips.createIndex({state:1})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

db.zips.find({state: "MA"}).pretty()

7)db.zips.updateMany({state: {$nin:["AK", "NY"]}}, {$inc:{pop: 0.2}})

{ "acknowledged" : true, "matchedCount" : 27563, "modifiedCount" : 27563 }

8)db.zips.updateOne({loc:{$lt:-71}, state:{$ne:"MA"}, pop: {$lt:200}}, {$set:{pop:0}})

{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }

9) -var rename = db.zips.update({}, {$rename: {city:"country"}})

-var newDoc = db.zips.findOne()

-newDoc.\_id = "99951"

-var addNew = db.zips.insertOne(newDoc)

-db.zips.find().forEach(function(obj){if(typeof obj.city == string){rename}else{addNew}})

some of output documents

{ "\_id" : "01002", "loc" : [ -72.51565, 42.377017 ], "pop" : 36963.2, "state" : "MA", "country" : "CUSHMAN" }

{ "\_id" : "01005", "loc" : [ -72.108354, 42.409698 ], "pop" : 4546.2, "state" : "MA", "country" : "BARRE" }

{ "\_id" : "01007", "loc" : [ -72.410953, 42.275103 ], "pop" : 10579.2, "state" : "MA", "country" : "BELCHERTOWN" }

{ "\_id" : "01008", "loc" : [ -72.936114, 42.182949 ], "pop" : 1240.2, "state" : "MA", "country" : "BLANDFORD" }

{ "\_id" : "01010", "loc" : [ -72.188455, 42.116543 ], "pop" : 3706.2, "state" : "MA", "country" : "BRIMFIELD" }

=====================================================================================================================

part 2

1) db.zips.aggregate([{$match: {state:{$in:["PA","KA"]}}}, {$group:{\_id:"$\_id",popSum:{$sum:"$pop"}}}])

2)db.zips.find({state:{$nin:["PA","KA"]}}).limit(5)

3)db.zips.aggregate([{$match: {state:"AK", loc:{$gt:55,$lt:65}, {$group:{\_id:"$\_id",total:{$sum:"$pop"}}}])

4)db.zips.find({state:{$in:["AK", "PA"]}}).sort({pop:-1}).skip(7).pretty()

5) -var minMaxPop = db.zips.aggregate([{$group:{\_id:"$state", min:{$min:"$pop"}, max:{$max:"$pop"}}}])

-db.mypop.insertMany([minMaxPop])

6)db.zips.aggregate([{$group:{\_id:"$state", avg:{$avg:"$pop"}}}])

7)db.zips.aggregate([{$sort:{state:1,country:1}}])

8)db.zips.aggregate([{$sort:{state:-1,country:-1}}])

9)db.zips.aggregate([{$match:{state:{$in:["CA", "NY"]}}},{$group:{\_id:"$state", avg:{$avg:"$pop"}}}])

{ "\_id" : "NY", "avg" : 11279.248902821317 }

{ "\_id" : "CA", "avg" : 19627.436147757257 }

10) db.zips.aggregate([{$group:{\_id:"$state", avg:{$avg:"$pop"}}}])