MongoDB Assignment Day 2

ATLANTA POPULATION

1. db.zipcodes.find({$and:[{city:”ATLANTA"},{state:"GA"}]})
2. db.zipcodes.aggregate([{$match:{$and:[{city:"ATLANTA"},{state:"GA"}]}}])
3. db.zipcodes.aggregate([{$match:{city:"ATLANTA"}},{$group:{_id:"$city", zipCount:{$sum:1} }}])
4. db.zipcodes.aggregate([{$match:{city:"ATLANTA"}},{$group:{_id:"$city", totalPopulation: {$sum:"$pop"} }}])

POPULATION BY STATE

1. db.zipcodes.aggregate([{$group:{_id:"$state", totalPopulation:{$sum:"$pop"} }},{$sort:{_id:1}}])
2. db.zipcodes.aggregate([{$group:{_id:"$state", totalPopulation:{$sum:"$pop"} }},{$sort: {totalPopulation:-1}}])
3. db.zipcodes.aggregate([{$group:{_id:"$state", totalPopulation:{$sum:"$pop"} }},{$sort: {totalPopulation:-1}},{$limit:3}])

POPULATION BY CITY

1. db.zipcodes.aggregate([{$group:{_id:{city:"$city",state:"$state"}, totalPopulation: {$sum:"$pop"} }},{$sort:{"_id.city":1,"_id.state":1}}])
2. db.zipcodes.aggregate([{$group:{_id:{city:"$city",state:"$state"}, totalPopulation: {$sum:"$pop"} }},{$sort:{totalPopulation:-1}}])
3. db.zipcodes.aggregate([{$group:{_id:{city:"$city",state:"$state"}, totalPopulation: {$sum:"$pop"} }},{$sort:{totalPopulation:-1}},{$limit:3}])
4. db.zipcodes.aggregate([{$match:{state:"TX"}},{$group:{_id:{city:"$city",state:"$state"}, totalPopulation:{$sum:"$pop"} }},{$sort:{totalPopulation:-1}},{$limit:3}])

BONUS

1. db.zipcodes.aggregate([{$group:{_id:"$state", averagePopulation:{$avg:"$pop"} }},{$sort: {_id:1}}])
2. db.zipcodes.aggregate([{$group:{_id:"$state", averagePopulation:{$avg:"$pop"} }},{$sort: {averagePopulation:-1}},{$limit:3}])