**Assignments -2(Aggregation Exercises):**

**Atlana population:**

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

**Population by state:**

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

**Population by city:**

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

**Bonus:**

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