

MONOGODB Day 2

Using "find" Part of assignment :

```
1 db.zipcodes.find({$and: [{city: "ATLANTA"},{state:"GA"}]})
```

Matching zipcodes

```
2 db.zipcodes.aggregate([{$match:{city:'ATLANTA',state:'GA'}}])
```

Grouping city to count zipcodes in atlanta

```
3 db.zipcodes.aggregate([{$match:{city:"ATLANTA"}},{ $group: {_id: "$city",count: {$sum : 1}}}]
```

Population in Atlanta

```
4 db.zipcodes.aggregate([{$match:{city:"ATLANTA"}},{ $group: {_id: "$city",total: {$sum : "$pop"}}}]
```

Population by state

```
5 db.zipcodes.aggregate([{$group: {_id: "$state",total: {$sum: "$pop"}}}]
```

Highest to lowest(States)

```
6 db.zipcodes.aggregate([{$group: {_id: "$state",total: {$sum: "$pop"}}},{ $sort:{total: -1}} ])
```

Limiting to 3

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

Total population of each city by combination of city and state

```
8 db.zipcodes.aggregate([{$group: {_id: {city: "$city",state: "$state",total: {$sum: "$pop"}}}} ])
```

Sorting in the combination

```
9 db.zipcodes.aggregate([{$group: {_id: {city: "$city",state: "$state",total: {$sum: "$pop"}}}},{$sort: {"_id.total": -1}} ])
```

Limiting to top threee

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

Top 3 cities in population in texas

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

Last Part:

Find average of population in states

```
12 db.zipcodes.aggregate([{$group: {_id: "$state",avgpopulation: {$avg :"$pop"}}}])
```

Top 3 states in terms of population