MongoDB Lab Assignments – A2

MongoDB -Aggregation Exercises

Import the zips.json file into your MongoDB. Database name is "population"
collection name is "zipcodes".
mongoimport -db population collection zipcodes --file zips.json
Ans: Use compass to import data.

Atlanta Population

1. use db.zipcodes.find() to filter results to only the results where city is ATLANTA and state is GA
Ans:- > db.zipcodes.find({city:"ATLANTA", state: "GA"})

2. use db.zipcodes.aggregate with Smatch to do the same as above.
Ans:- > db.zipcodes.aggregate([{$match:{city:"ATLANTA", state: "GA"}}])

3. use $group to count the number of zip codes in Atlanta.
Ans:- >db.zipcodes.find({city : "ATLANTA", state:"GA"}} .count()   =   31

4. use $group to find the total population in Atlanta.
Ans:- > db.zipcodes.aggregate([{$match:{city:"ATLANTA"}} ,{$group : {_id:null, "totalpopulation" : {$sum : "$pop"}}}])

{ "_id" : null, "totalpopulation" : 630046 }

Populations By State

1. use aggregate to calculate the total population for each state
Ans:- > db.zipcodes.aggregate([{$group : {_id:"$state","totalpopulation" : {$sum : "$pop"}}}])

2. sort the results by population, highest first
Ans:- > db.zipcodes.aggregate([{$group : {_id:"$state","totalpopulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}}])

3. limit the results to just the first 3 results. What are the top 3 states in population?
Ans:- > db.zipcodes.aggregate([{$group : {_id:"$state","totalpopulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}} , {$limit:3}])

{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "NY", "totalpopulation" : 17990402 }
{ "_id" : "TX", "totalpopulation" : 16984601 }

Populations by City

1. use aggregate to calculate the total population for each city (you have to use city/state combination). You can use a combination for the id of the Sgroup:
(city: Scity, state: 'Sstate')
Ans:- > db.zipcodes.aggregate([{$group : {_id :{city: "$city","state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}])

2 sort the results by population, highest first
Ans:- > db.zipcodes.aggregate([{$group : {_id :{city: "$city","state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}, {$sort: {totalpopulation: -1}}])

3. limit the results to just the first 3 results. What are the top 3 cities in population?
Ans:- > db.zipcodes.aggregate([{$group : {_id:"$state","totalpopulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}} , {$limit:3}])

{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "NY", "totalpopulation" : 17990402 }
{ "_id" : "TX", "totalpopulation" : 16984601 }

4. What are the top 3 cities in population in Texas?

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

{ "_id" : { "city" : "HOUSTON", "state" : "TX" }, "totalpopulation" : 2095918 }
{ "_id" : { "city" : "DALLAS", "state" : "TX" }, "totalpopulation" : 940191 }
{ "_id" : { "city" : "SAN ANTONIO", "state" : "TX" }, "totalpopulation" : 811792 }

Bonus

1. Write a query to get the average city population for each state.

Ans:- > db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group : {_id: {city : "$city" , state : "$state"} , pop : {$sum : "$pop"}}} , {$group : {_id : "$_id.state" , avgCityPop : {$avg : "$pop" }}}])

{ "_id" : "TX", "avgCityPop" : 13775.02108678021 }

2. What are the top 3 states in terms of average city population?

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

{ "_id" : "DC", "avgCityPop" : 303450 }
{ "_id" : "CA", "avgCityPop" : 27756.42723880597 }
{ "_id" : "FL", "avgCityPop" : 27400.958963282937 }

ScreenShots:-

```
{ "_id" : "MN", "totalpopulation" : 4372982 }
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id:"$state","totalpo
pulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}} , {$limit:3}])
{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "NY", "totalpopulation" : 17990402 }
{ "_id" : "TX", "totalpopulation" : 16984601 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id : city: "$city","
state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:44
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id : city: "$city","
state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:44
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id : city: "$city","
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uncaught exception: SyntaxError: missing } after property list :
@(shell):1:44
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id :{city: "$city","
state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}])
{ "_id" : { "city" : "HOOKERTON", "state" : "NC" }, "totalpopulation" : 2112 }
{ "_id" : { "city" : "ALMA", "state" : "AR" }, "totalpopulation" : 7443 }
{ "_id" : { "city" : "FANCY PRAIRIE", "state" : "IL" }, "totalpopulation" : 2696 }
{ "_id" : { "city" : "TAYLOR", "state" : "MS" }, "totalpopulation" : 2374 }
{ "_id" : { "city" : "ELK HORN", "state" : "IA" }, "totalpopulation" : 990 }
{ "_id" : { "city" : "PRAIRIE", "state" : "AL" }, "totalpopulation" : 112 }
{ "_id" : { "city" : "REDWOOD", "state" : "MS" }, "totalpopulation" : 912 }
{ "_id" : { "city" : "MINOCQUA", "state" : "WI" }, "totalpopulation" : 3793 }
{ "_id" : { "city" : "LYNNVILLE", "state" : "TN" }, "totalpopulation" : 2712 }
{ "_id" : { "city" : "GALVA", "state" : "IL" }, "totalpopulation" : 3725 }
{ "_id" : { "city" : "EVERGREEN", "state" : "CO" }, "totalpopulation" : 19250 }
{ "_id" : { "city" : "DUBBERLY", "state" : "LA" }, "totalpopulation" : 1117 }
{ "_id" : { "city" : "SUMMERFIELD", "state" : "LA" }, "totalpopulation" : 25 }
{ "_id" : { "city" : "SAVANNAH", "state" : "MO" }, "totalpopulation" : 7599 }
{ "_id" : { "city" : "ISLAND POND", "state" : "VT" }, "totalpopulation" : 1585 }
{ "_id" : { "city" : "GERLAW", "state" : "IL" }, "totalpopulation" : 520 }
{ "_id" : { "city" : "CONSTANTINE", "state" : "MI" }, "totalpopulation" : 5737 }
{ "_id" : { "city" : "LONDONDERRY", "state" : "NH" }, "totalpopulation" : 19687 }
{ "_id" : { "city" : "LANEXA", "state" : "VA" }, "totalpopulation" : 3609 }
{ "_id" : { "city" : "BELTON", "state" : "SC" }, "totalpopulation" : 11371 }
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id :{city: "$city","
state" : "$state"} , "totalpopulation" : {$sum : "$pop"}}}])
{ "_id" : { "city" : "VERONA", "state" : "VA" }, "totalpopulation" : 4491 }
{ "_id" : { "city" : "NEW MARSHFIELD", "state" : "OH" }, "totalpopulation" : 2321 }
{ "_id" : { "city" : "MARLBOROUGH", "state" : "NH" }, "totalpopulation" : 1927 }
{ "_id" : { "city" : "STARR", "state" : "SC" }, "totalpopulation" : 2995 }
{ "_id" : { "city" : "MACOMB", "state" : "MI" }, "totalpopulation" : 51044 }
```

```
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{city:"ATLANTA"}} ,{$gro
up : {_id:null, "totalpopulation" : {$sum : "$pop"}}}])
{ "_id" : null, "totalpopulation" : 630046 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{city:"ATLANTA"}} ,{$gro
up : {_id:null, "totalpopulation" : {$sum : "$pop"}}}]);
{ "_id" : null, "totalpopulation" : 630046 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id:"$state","totalpo
pulation" : {$sum : "$pop"}}}])
{ "_id" : "DC", "totalpopulation" : 606900 }
{ "_id" : "KY", "totalpopulation" : 3675484 }
{ "_id" : "SD", "totalpopulation" : 695397 }
{ "_id" : "MI", "totalpopulation" : 9295297 }
{ "_id" : "OK", "totalpopulation" : 3145585 }
{ "_id" : "NV", "totalpopulation" : 1201833 }
{ "_id" : "CO", "totalpopulation" : 3293755 }
{ "_id" : "AZ", "totalpopulation" : 3665228 }
{ "_id" : "UT", "totalpopulation" : 1722850 }
{ "_id" : "WA", "totalpopulation" : 4866692 }
{ "_id" : "WY", "totalpopulation" : 453528 }
{ "_id" : "GA", "totalpopulation" : 6478216 }
{ "_id" : "AL", "totalpopulation" : 4040587 }
{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "ND", "totalpopulation" : 638272 }
{ "_id" : "NJ", "totalpopulation" : 7730188 }
{ "_id" : "CT", "totalpopulation" : 3287116 }
{ "_id" : "KS", "totalpopulation" : 2475285 }
{ "_id" : "NE", "totalpopulation" : 1578139 }
{ "_id" : "IN", "totalpopulation" : 5544136 }
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id:"$state","totalpo
pulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}}])
{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "NY", "totalpopulation" : 17990402 }
{ "_id" : "TX", "totalpopulation" : 16984601 }
{ "_id" : "FL", "totalpopulation" : 12686644 }
{ "_id" : "PA", "totalpopulation" : 11881643 }
{ "_id" : "IL", "totalpopulation" : 11427576 }
{ "_id" : "OH", "totalpopulation" : 10846517 }
{ "_id" : "MI", "totalpopulation" : 9295297 }
{ "_id" : "NJ", "totalpopulation" : 7730188 }
{ "_id" : "NC", "totalpopulation" : 6628637 }
{ "_id" : "GA", "totalpopulation" : 6478216 }
{ "_id" : "VA", "totalpopulation" : 6181479 }
{ "_id" : "MA", "totalpopulation" : 6016425 }
{ "_id" : "IN", "totalpopulation" : 5544136 }
{ "_id" : "MO", "totalpopulation" : 5110648 }
{ "_id" : "WI", "totalpopulation" : 4891769 }
{ "_id" : "TN", "totalpopulation" : 4876457 }
```

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Error: error doing query: failed: network error while attempting to run command 'find' on host 'cluster0
-shard-00-01.7c1th.mongodb.net:27017'
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.find({city:"ATLANTA", state: "GA"})
{ "_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" : "GA" }

{ "_id" : "30305", "city" : "ATLANTA", "loc" : [ -84.385145, 33.831963 ], "pop" : 19122, "state" : "GA"
}
{ "_id" : "30306", "city" : "ATLANTA", "loc" : [ -84.351418, 33.786027 ], "pop" : 20081, "state" : "GA"
}
{ "_id" : "30307", "city" : "ATLANTA", "loc" : [ -84.335957, 33.769138 ], "pop" : 16330, "state" : "GA"
}
{ "_id" : "30308", "city" : "ATLANTA", "loc" : [ -84.375744, 33.771839 ], "pop" : 8549, "state" : "GA" }

{ "_id" : "30309", "city" : "ATLANTA", "loc" : [ -84.388338, 33.798407 ], "pop" : 14766, "state" : "GA"
}
{ "_id" : "30310", "city" : "ATLANTA", "loc" : [ -84.423173, 33.727849 ], "pop" : 34017, "state" : "GA"
}
{ "_id" : "30311", "city" : "ATLANTA", "loc" : [ -84.470219, 33.722957 ], "pop" : 34880, "state" : "GA"
}
{ "_id" : "30312", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" : "GA"
}
{ "_id" : "30313", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }
{ "_id" : "30314", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "state" : "GA"
}
{ "_id" : "30315", "city" : "ATLANTA", "loc" : [ -84.380771, 33.705062 ], "pop" : 41061, "state" : "GA"
}
{ "_id" : "30316", "city" : "ATLANTA", "loc" : [ -84.333913, 33.721686 ], "pop" : 34668, "state" : "GA"
}
{ "_id" : "30317", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" : "GA" }
{ "_id" : "30318", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" : "GA"
}
{ "_id" : "30319", "city" : "ATLANTA", "loc" : [ -84.335091, 33.868728 ], "pop" : 32138, "state" : "GA"
}
{ "_id" : "30324", "city" : "ATLANTA", "loc" : [ -84.354867, 33.820609 ], "pop" : 15044, "state" : "GA"
}
{ "_id" : "30326", "city" : "ATLANTA", "loc" : [ -84.358232, 33.848168 ], "pop" : 125, "state" : "GA" }
{ "_id" : "30327", "city" : "ATLANTA", "loc" : [ -84.419966, 33.862723 ], "pop" : 18467, "state" : "GA"
}
{ "_id" : "30329", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" : "GA"
}
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.find({city:"ATLANTA", state: "GA"}).count()

31
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY>
```

```
{ "_id" : "30329", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" : "GA"
}
Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{city:"ATLANTA", state:
"GA"}}])
{ "_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" : "GA" }

{ "_id" : "30305", "city" : "ATLANTA", "loc" : [ -84.385145, 33.831963 ], "pop" : 19122, "state" : "GA"
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}
{ "_id" : "30312", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" : "GA"
}
{ "_id" : "30313", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }
{ "_id" : "30314", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "state" : "GA"
}
{ "_id" : "30315", "city" : "ATLANTA", "loc" : [ -84.380771, 33.705062 ], "pop" : 41061, "state" : "GA"
}
{ "_id" : "30316", "city" : "ATLANTA", "loc" : [ -84.333913, 33.721686 ], "pop" : 34668, "state" : "GA"
}
{ "_id" : "30317", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" : "GA" }

{ "_id" : "30318", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" : "GA"
}
{ "_id" : "30319", "city" : "ATLANTA", "loc" : [ -84.335091, 33.868728 ], "pop" : 32138, "state" : "GA"
}
{ "_id" : "30324", "city" : "ATLANTA", "loc" : [ -84.354867, 33.820609 ], "pop" : 15044, "state" : "GA"
}
{ "_id" : "30326", "city" : "ATLANTA", "loc" : [ -84.358232, 33.848168 ], "pop" : 125, "state" : "GA" }
{ "_id" : "30327", "city" : "ATLANTA", "loc" : [ -84.419966, 33.862723 ], "pop" : 18467, "state" : "GA"
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Type "it" for more
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{city:"ATLANTA"}} ,{$gro
up : {_id:null, "totalpopulation" : {$sum : "$pop"}}}])
{ "_id" : null, "totalpopulation" : 630046 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{city:"ATLANTA"}} ,{$gro
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```

```
Error while trying to show server startup warnings: user is not allowed to do action [getLog] on [admin.
]
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> show dbs
admin          0.000GB
local          4.032GB
mongo_practice 0.000GB
population     0.003GB
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> use population
switched to db population
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcode.find({city:"AATLANTA", state: "GA"})
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcode.find({city:"ATLANTA", state: "GA"})
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.find({city:"ATLANTA", state: "GA"})
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{ "_id" : "30305", "city" : "ATLANTA", "loc" : [ -84.385145, 33.831963 ], "pop" : 19122, "state" : "GA"
}
{ "_id" : "30306", "city" : "ATLANTA", "loc" : [ -84.351418, 33.786027 ], "pop" : 20081, "state" : "GA"
}
{ "_id" : "30307", "city" : "ATLANTA", "loc" : [ -84.335957, 33.769138 ], "pop" : 16330, "state" : "GA"
}
{ "_id" : "30308", "city" : "ATLANTA", "loc" : [ -84.375744, 33.771839 ], "pop" : 8549, "state" : "GA" }

{ "_id" : "30309", "city" : "ATLANTA", "loc" : [ -84.388338, 33.798407 ], "pop" : 14766, "state" : "GA"
}
{ "_id" : "30310", "city" : "ATLANTA", "loc" : [ -84.423173, 33.727849 ], "pop" : 34017, "state" : "GA"
}
{ "_id" : "30311", "city" : "ATLANTA", "loc" : [ -84.470219, 33.722957 ], "pop" : 34880, "state" : "GA"
}
{ "_id" : "30312", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" : "GA"
}
{ "_id" : "30313", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }
{ "_id" : "30314", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "state" : "GA"
}
{ "_id" : "30315", "city" : "ATLANTA", "loc" : [ -84.380771, 33.705062 ], "pop" : 41061, "state" : "GA"
}
{ "_id" : "30316", "city" : "ATLANTA", "loc" : [ -84.333913, 33.721686 ], "pop" : 34668, "state" : "GA"
}
{ "_id" : "30317", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" : "GA" }

{ "_id" : "30318", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" : "GA"
}
{ "_id" : "30319", "city" : "ATLANTA", "loc" : [ -84.335091, 33.868728 ], "pop" : 32138, "state" : "GA"
}
{ "_id" : "30324", "city" : "ATLANTA", "loc" : [ -84.354867, 33.820609 ], "pop" : 15044, "state" : "GA"
}
{ "_id" : "30326", "city" : "ATLANTA", "loc" : [ -84.358232, 33.848168 ], "pop" : 125, "state" : "GA" }
{ "_id" : "30327", "city" : "ATLANTA", "loc" : [ -84.419966, 33.862723 ], "pop" : 18467, "state" : "GA"
}
{ "_id" : "30329", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" : "GA"
```

```
population        0.003GB
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> use population
switched to db population
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id:"$state","totalpo
pulation" : {$sum : "$pop"}}} , {$sort : {totalpopulation: -1}} , {$limit:3}])
{ "_id" : "CA", "totalpopulation" : 29754890 }
{ "_id" : "NY", "totalpopulation" : 17990402 }
{ "_id" : "TX", "totalpopulation" : 16984601 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group
: {_id: city : "$city" , state : "$state"}"totalpopulation" : {$sum : "$pop"}} , {$sort : {totalpopulati
on: -1}} , {$limit:3}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:68
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group
: {_id: city : "$city" , state : "$state"} , "totalpopulation" : {$sum : "$pop"}} , {$sort : {totalpopul
ation: -1}} , {$limit:3}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:68
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group
: {_id: {city : "$city" , state : "$state"} , "totalpopulation" : {$sum : "$pop"}}} , {$sort : {totalpop
ulation: -1}} , {$limit:3}])
{ "_id" : { "city" : "HOUSTON", "state" : "TX" }, "totalpopulation" : 2095918 }
{ "_id" : { "city" : "DALLAS", "state" : "TX" }, "totalpopulation" : 940191 }
{ "_id" : { "city" : "SAN ANTONIO", "state" : "TX" }, "totalpopulation" : 811792 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group
: {_id: {city : "$city" , state : "$state"} , pop : {$sum : "$pop"}}} , {$group : {_id : "$_id.state" ,
avgCityPop : {$avg : "$pop" }}}])
{ "_id" : "TX", "avgCityPop" : 13775.02108678021 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$match:{state:"TX"}} , {$group
: {_id: {state : "$state" , city : "$city"} , pop : {$sum : "$pop"}}} , {$group: {_id: "$id.state, avgCi
tyPop : { $avg: "$pop" }}} ,{$sort : {avgCityPop: -1}} , {$limit:3}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:176
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id: {state : "$state
" , city : "$city"} , pop : {$sum : "$pop"}}} , {$group: {_id: "$_id.state, avgCityPop : { $avg: "$pop"
}}} ,{$sort : {avgCityPop: -1}} , {$limit:3}])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:153
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.aggregate([{$group : {_id: {state : "$state
" , city : "$city"} , pop : {$sum : "$pop"}}} , {$group: {_id: "$_id.state", avgCityPop : { $avg: "$pop"
}}} ,{$sort : {avgCityPop: -1}} , {$limit:3}])
{ "_id" : "DC", "avgCityPop" : 303450 }
{ "_id" : "CA", "avgCityPop" : 27756.42723880597 }
{ "_id" : "FL", "avgCityPop" : 27400.958963282937 }
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.find({city:"ATLANTA", state: "GA"})
Error: error doing query: failed: network error while attempting to run command 'find' on host 'cluster0
-shard-00-01.7c1th.mongodb.net:27017'
MongoDB Enterprise atlas-b9aweb-shard-0:PRIMARY> db.zipcodes.find({city:"ATLANTA", state: "GA"})
{ "_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" : "GA" }
```