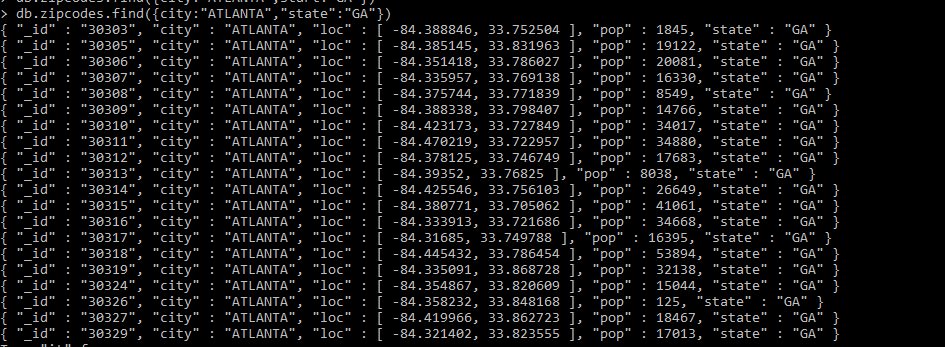
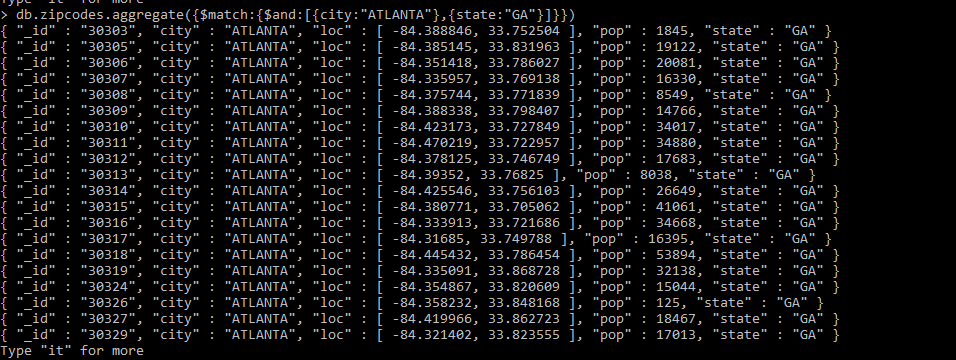
**MongoDB -Aggregation Exercises**

**Atlanta Population**

1.use db.zipcodes.find() to filter results to only the results where city is ATLANTA and state is GA.

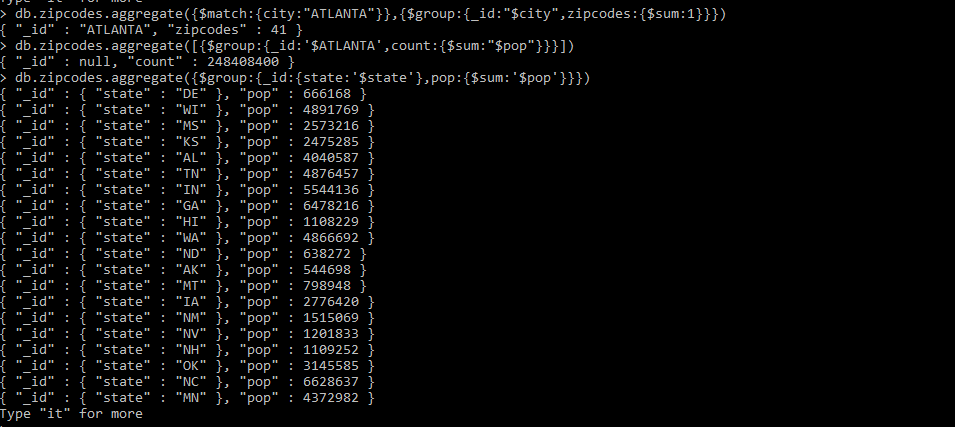


2. use db.zipcodes.aggregate with $match to do the same as above.



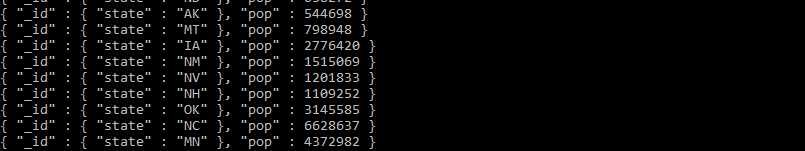
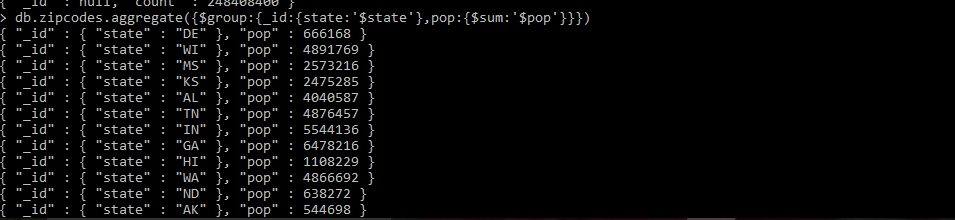
3. use $group to count the number of zip codes in Atlanta.

4. use $group to find the total population in Atlanta.

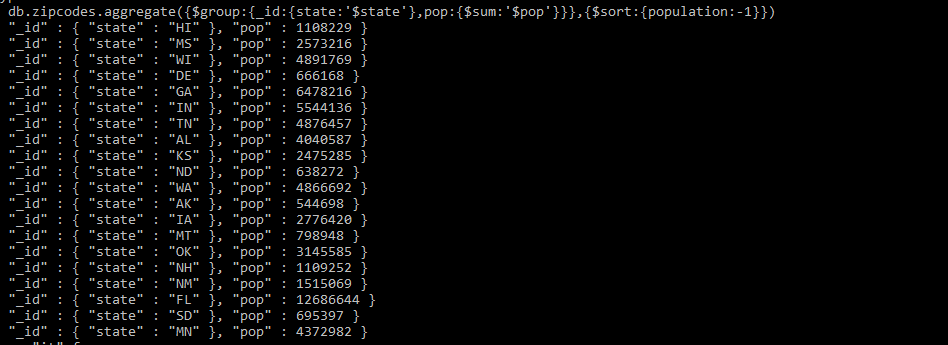


**Populations By State**

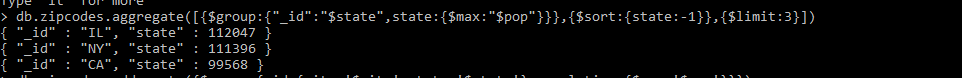
1. use aggregate to calculate the total population for each state



2.sort the results by population, highest first

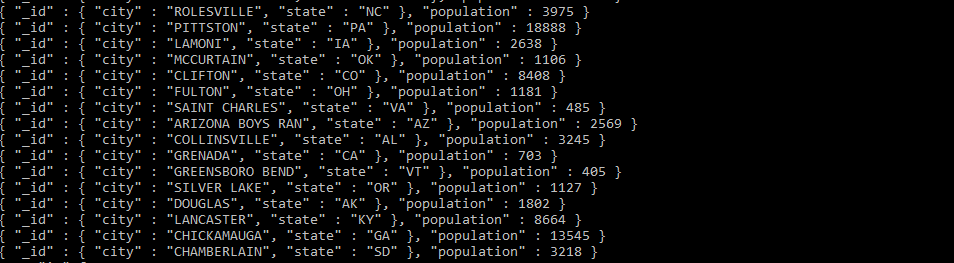
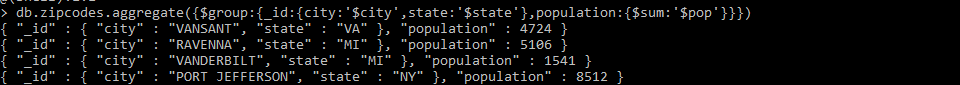


3. limit the results to just the first 3 results. What are the top 3 states in population?

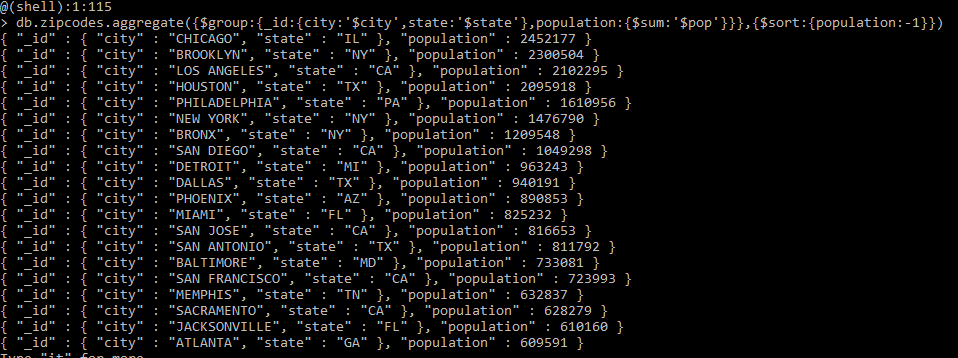


**Populations by City**

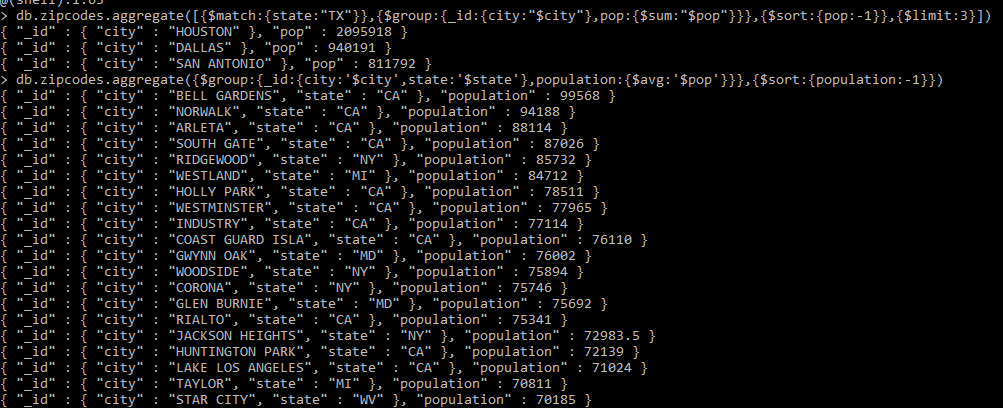
1. use aggregate to calculate the total population for each city (you have to use city/state combination). You can use a combination for the \_id of the $group: { city: '$city', state: '$state' }



1. sort the results by population, highest first



1. limit the results to just the first 3 results. What are the top 3 cities in population?
2. What are the top 3 cities in population in Texas?



**Bonus**

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

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

