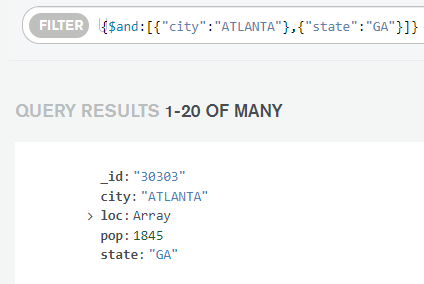
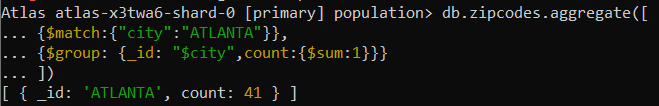
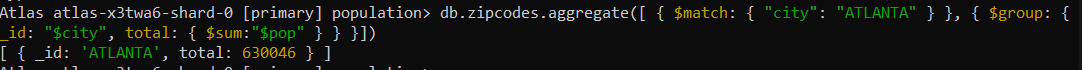
**MongoDB -Aggregation Exercises**

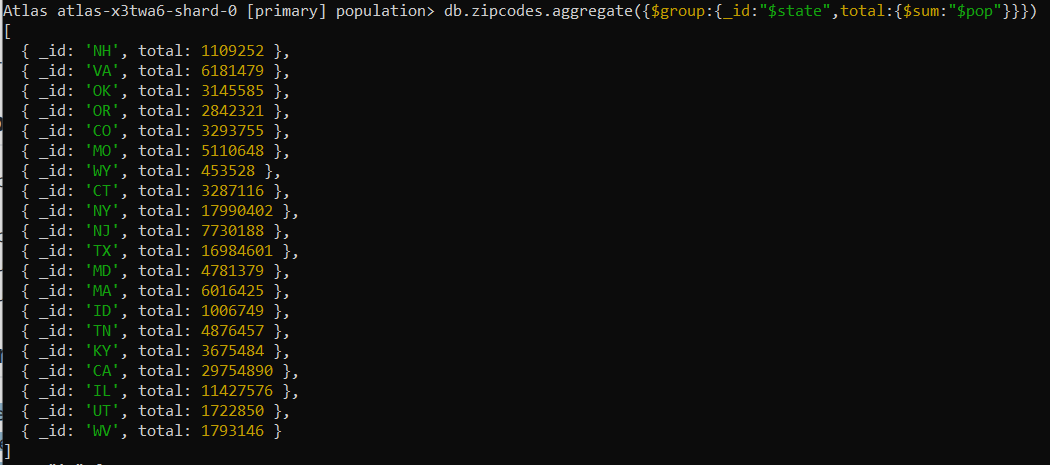
**Atlanta Population**

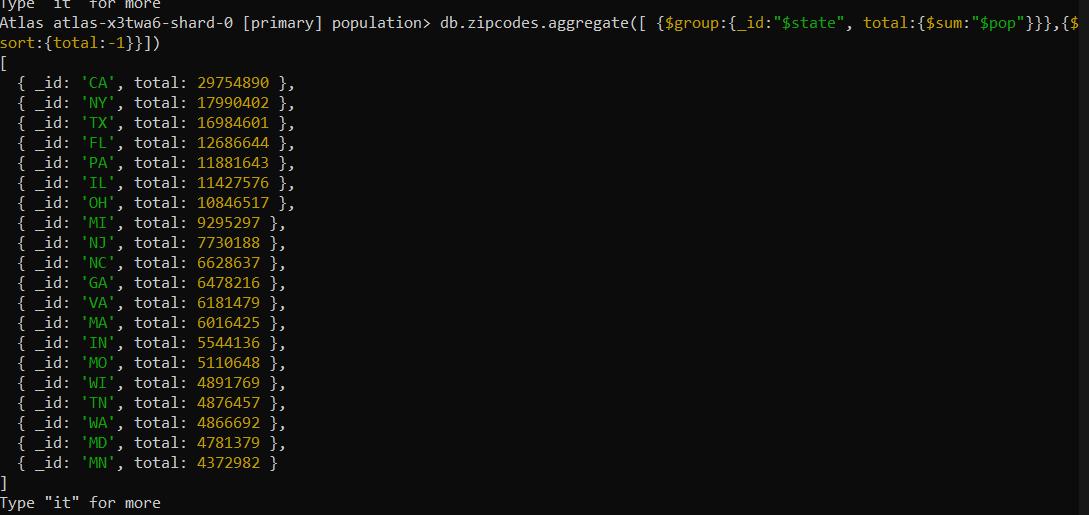
1. use db.zipcodes.find() to filter results to only the results where city is ATLANTA and state is GA.
2. use db.zipcodes.aggregate with $match to do the same as above
3. use $group to count the number of zip codes in Atlanta.



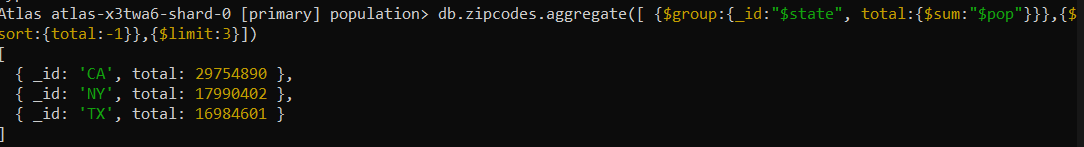
1. use $group to find the total population in Atlanta.

**Populations By State**

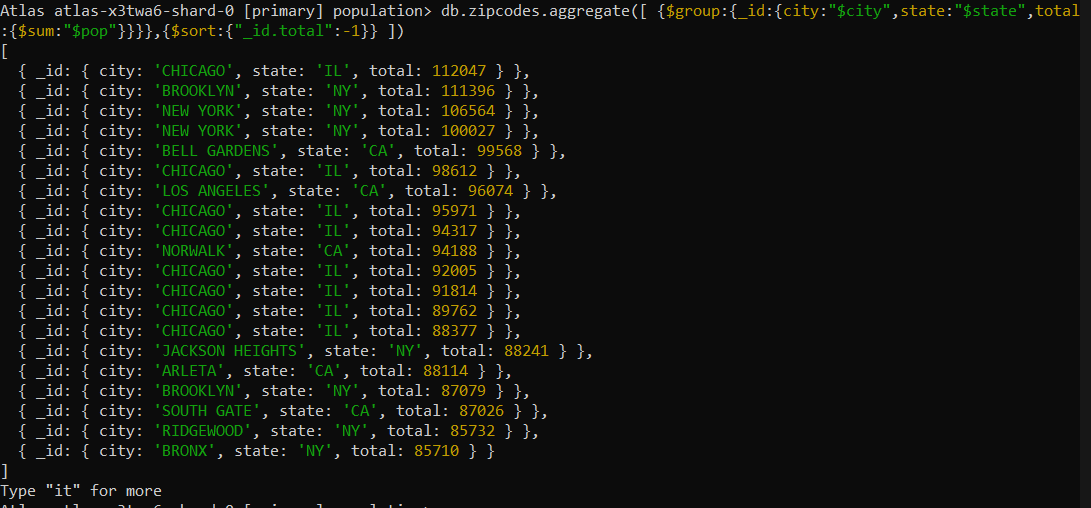
 1. use aggregate to calculate the total population for each state

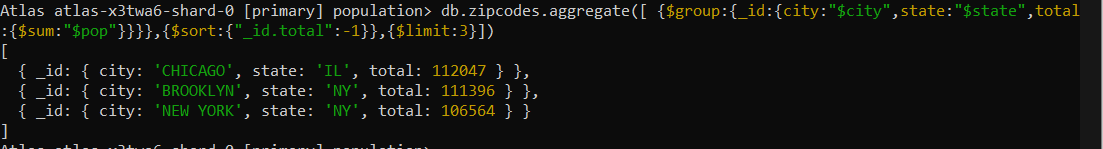
2. sort the results by population, highest first

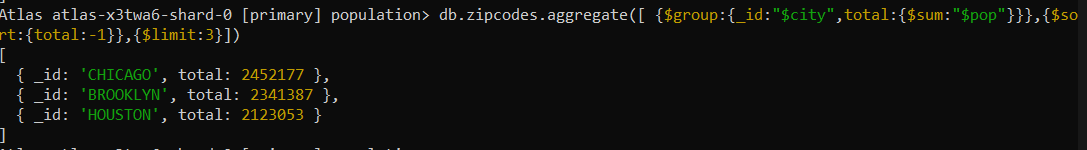
3. limit the results to just the first 3 results. What are the top 3 states in population



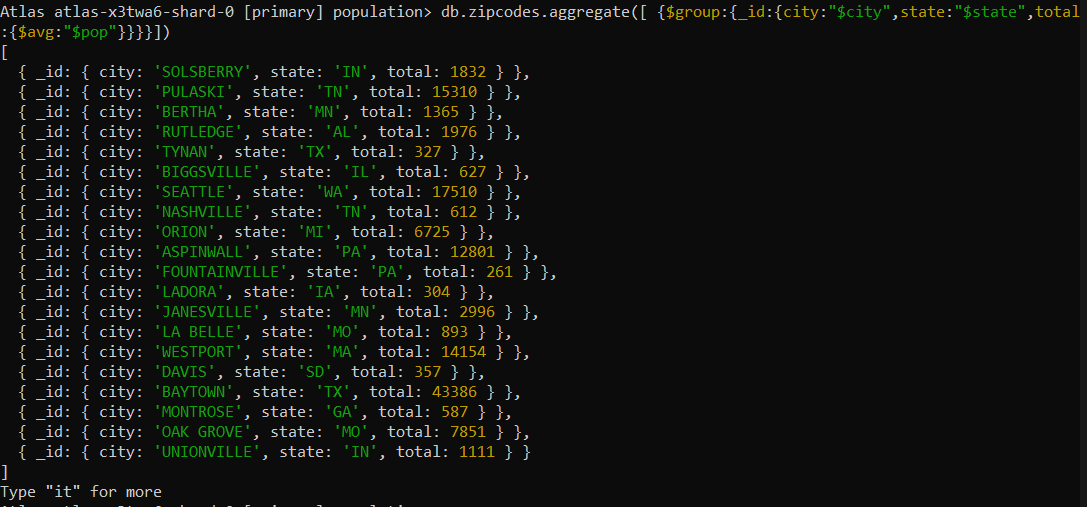
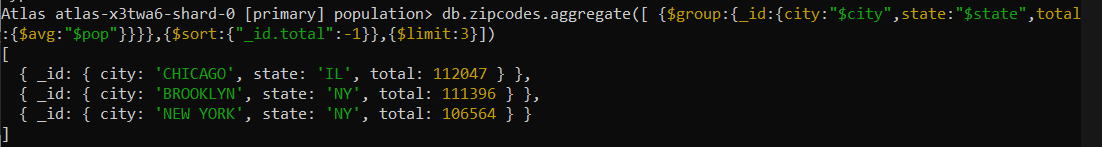
**Populations by City**

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'}
2. sort the results by population, highest first .
3. limit the results to just the first 3 results. What are the top 3 cities in population?



1. 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