**MongoDB -Aggregation Exercises**

Import the zips.json file into your MongoDB. Database name is "population" and collection name is "zipcodes". mongoimport --db population --collection zipcodes --file zips.json

**Database**



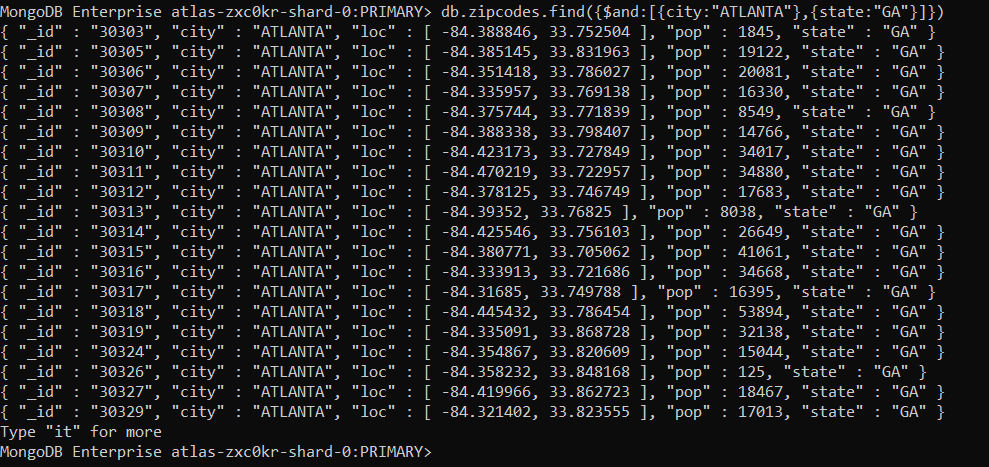
**Collection**



**Atlanta Population**

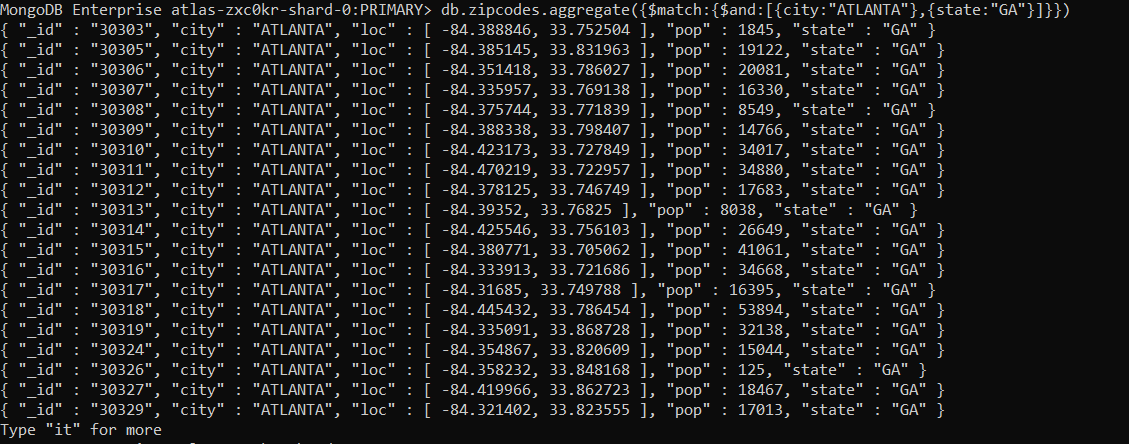
1. use db.zipcodes.find() to filter results to only the results where city is ATLANTA and state is GA.





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





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

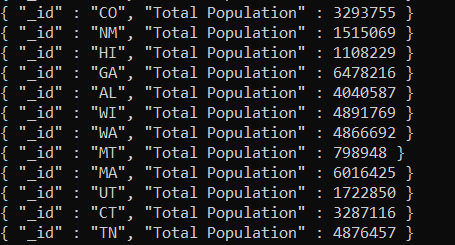


1. use $group to find the total population in Atlanta

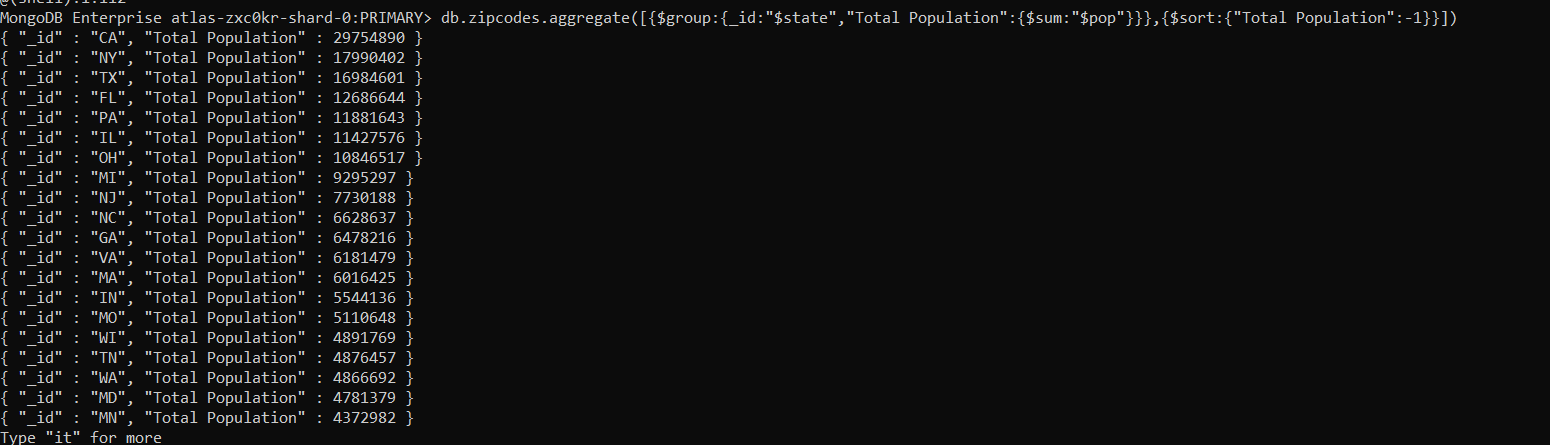


**Populations By State**

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

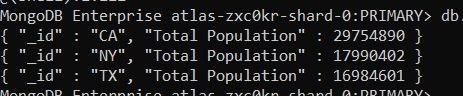


1. sort the results by population, highest first.



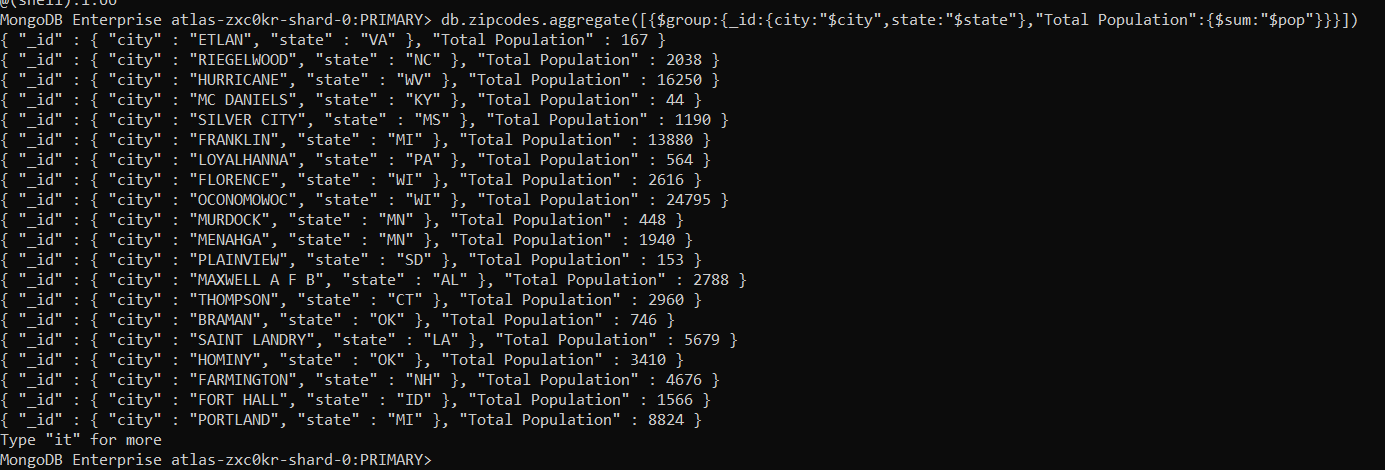
1. limit the results to just the first 3 results. What are the top 3 states in population?



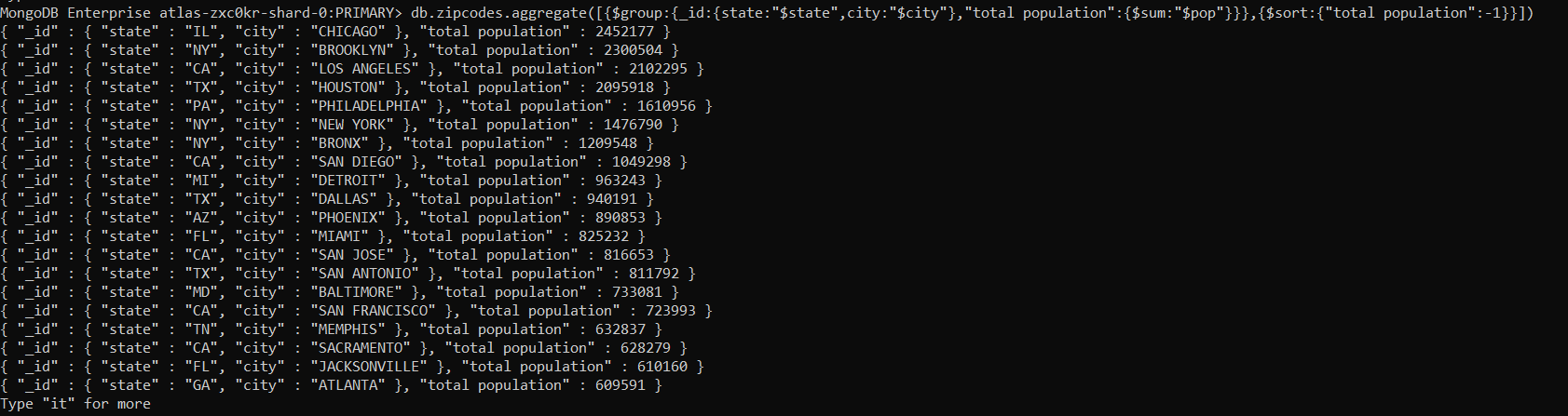


**Populations by City**

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' }

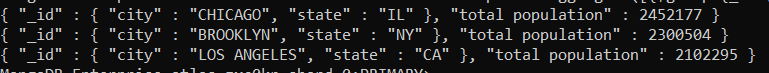


1. sort the results by population, highest first



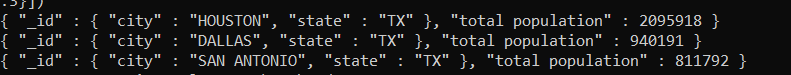
1. limit the results to just the first 3 results. What are the top 3 cities in population?





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

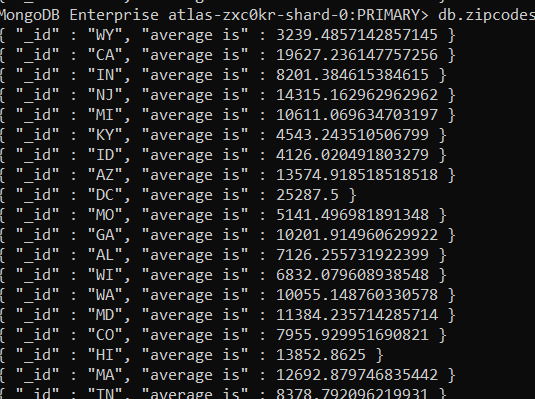




**Bonus**

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?



