**Name – Ananya Mehta**

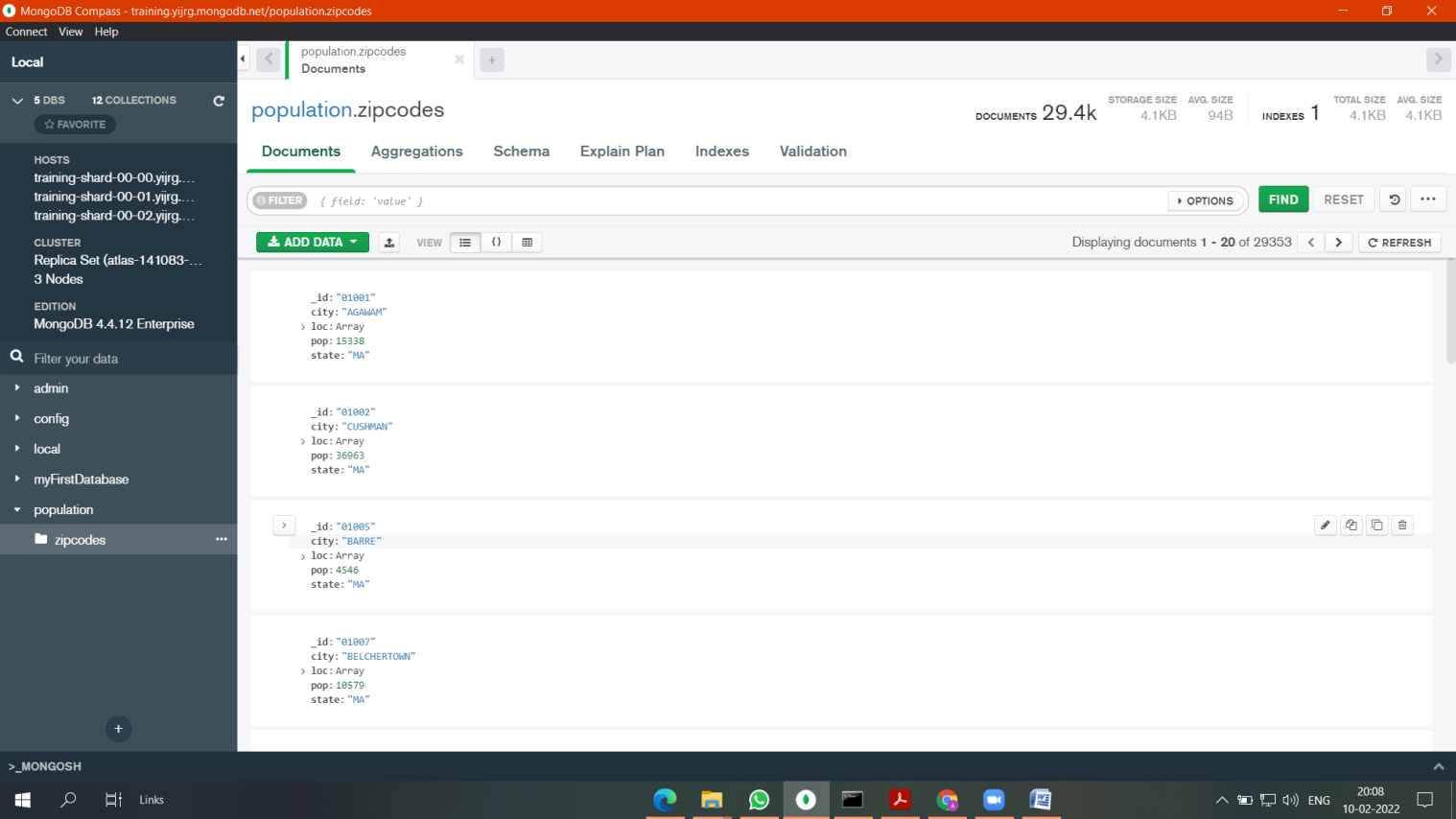
**Superset id – 541349**

**Email –** [**ananymehta@gmail.com**](mailto:ananymehta@gmail.com)

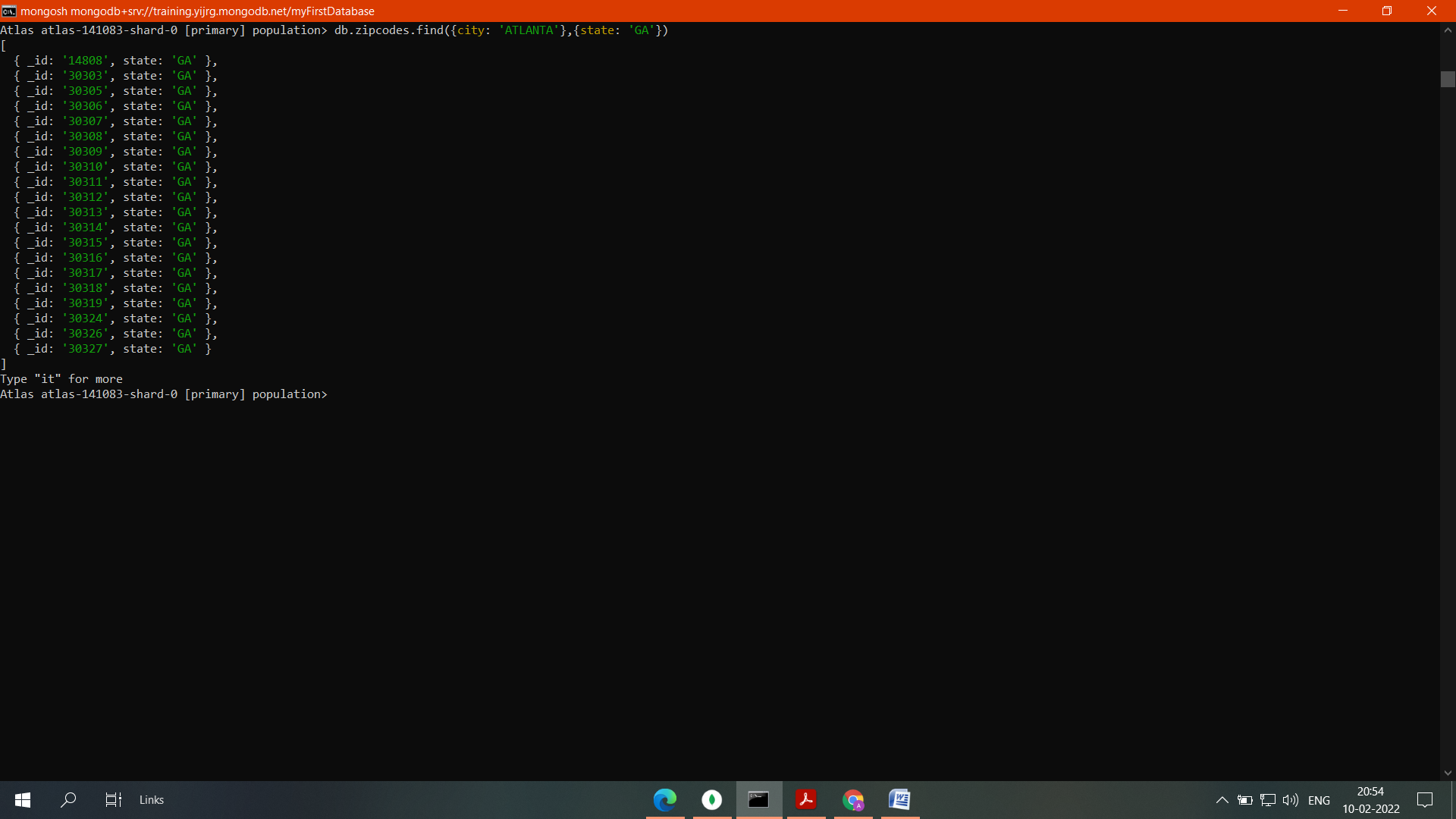
**MongoDB -Aggregation Exercises**

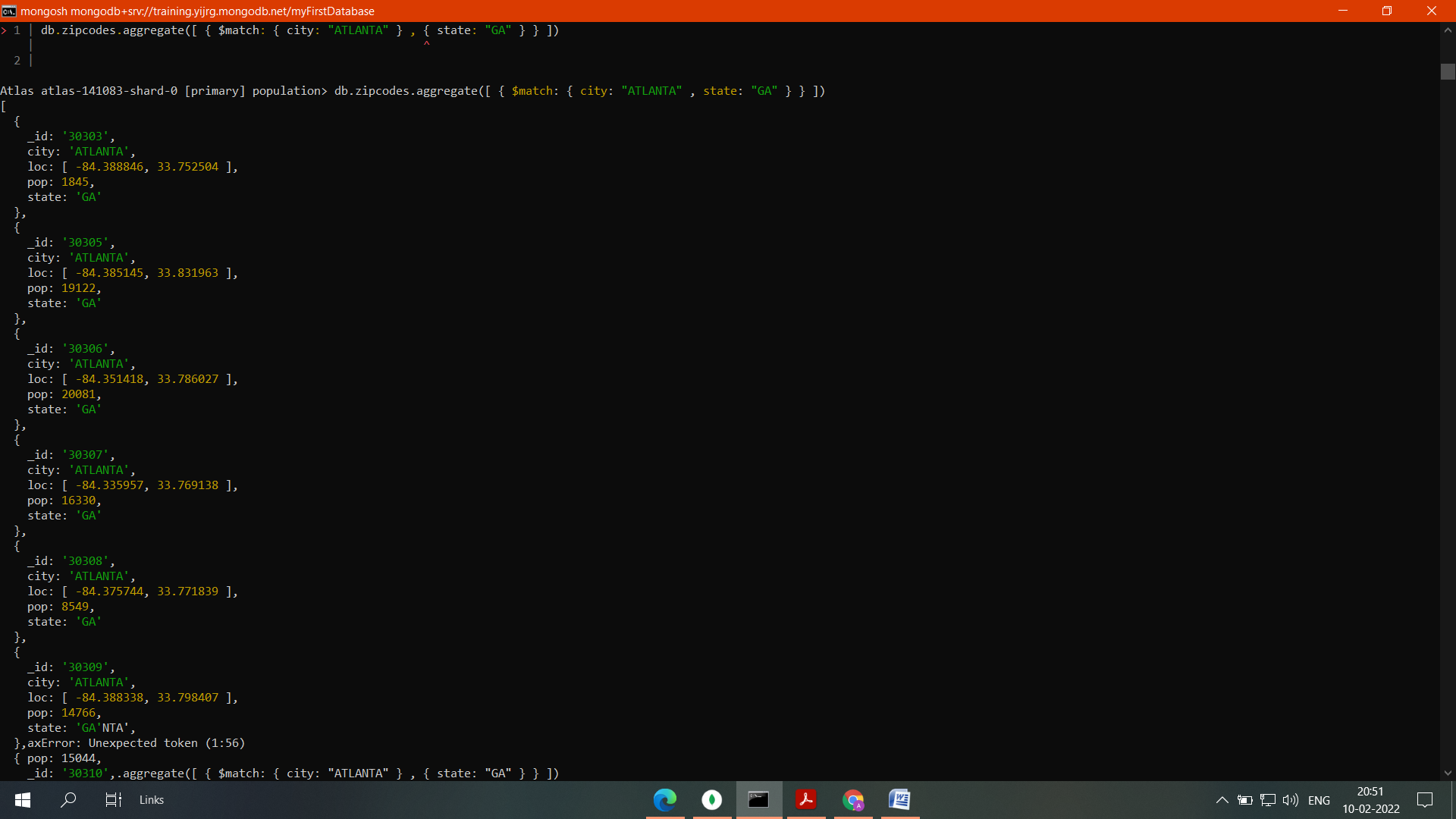
Import the zips.json file into your MongoDB. Database name is "population" and collection name is "zipcodes".

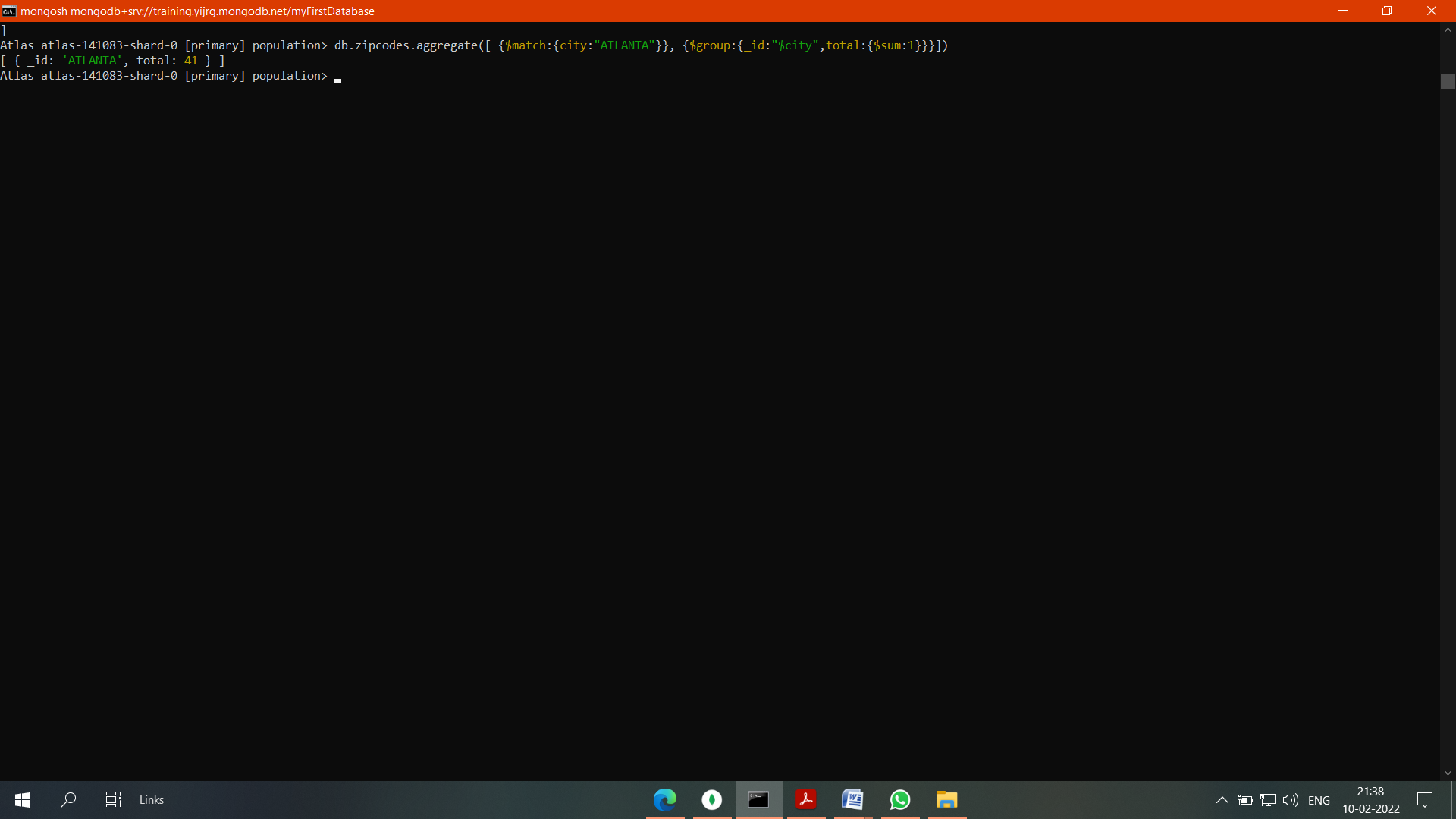
mongoimport --db population --collection zipcodes --file zips.json

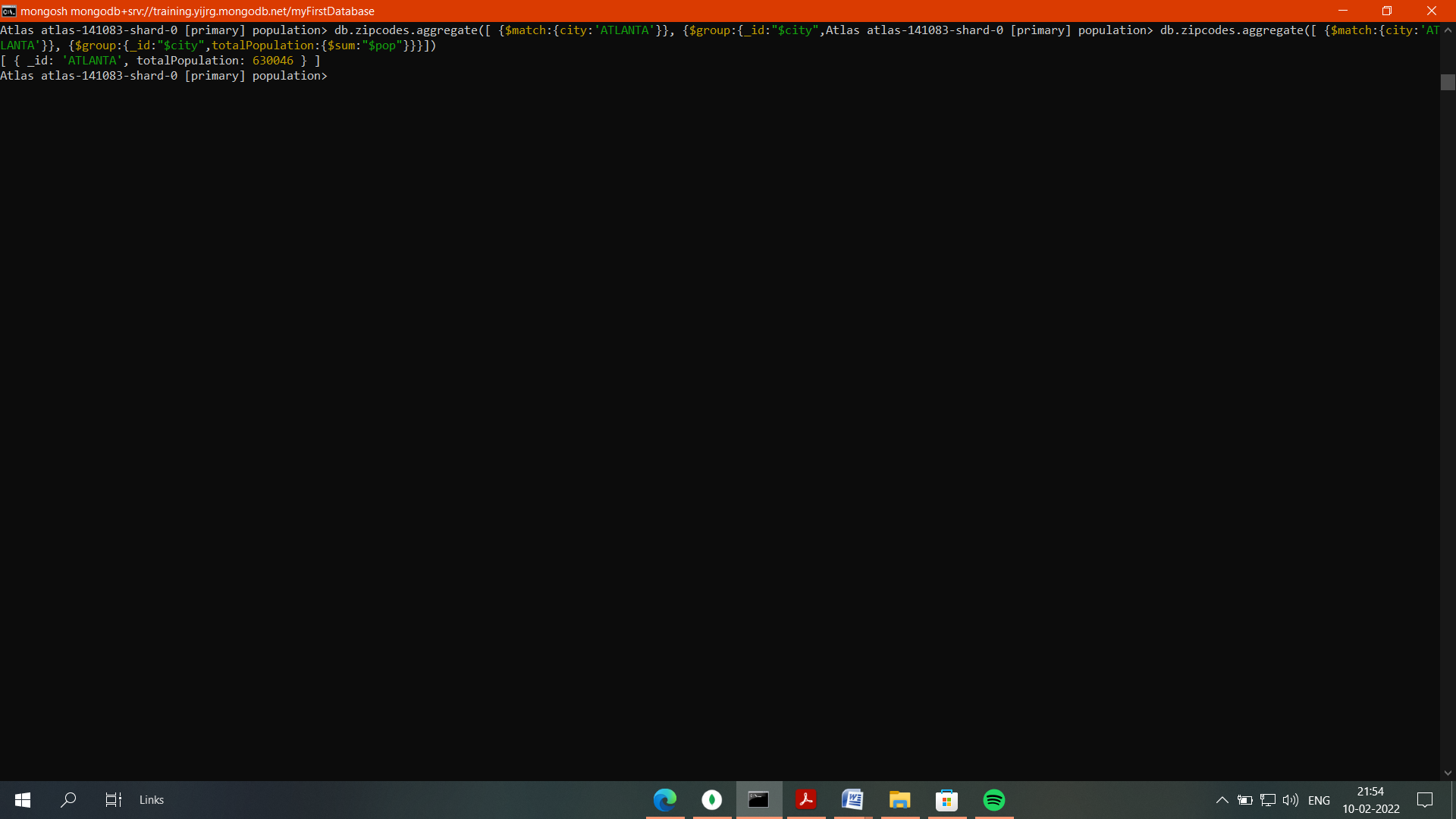


**Atlanta Population**

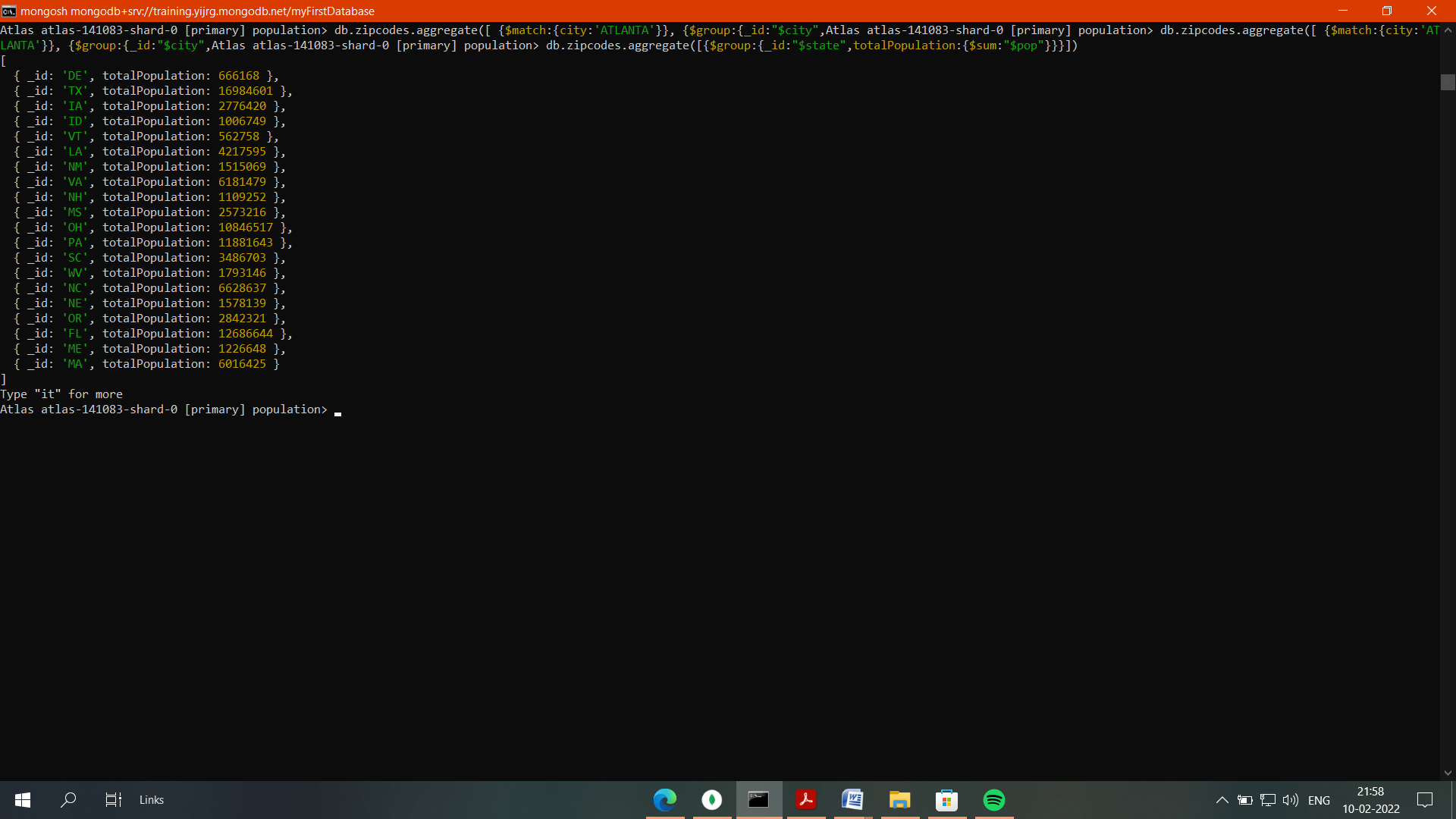
1. use db.zipcodes.find() to filter results to only the results where city is ATLANTA and state is GA. 

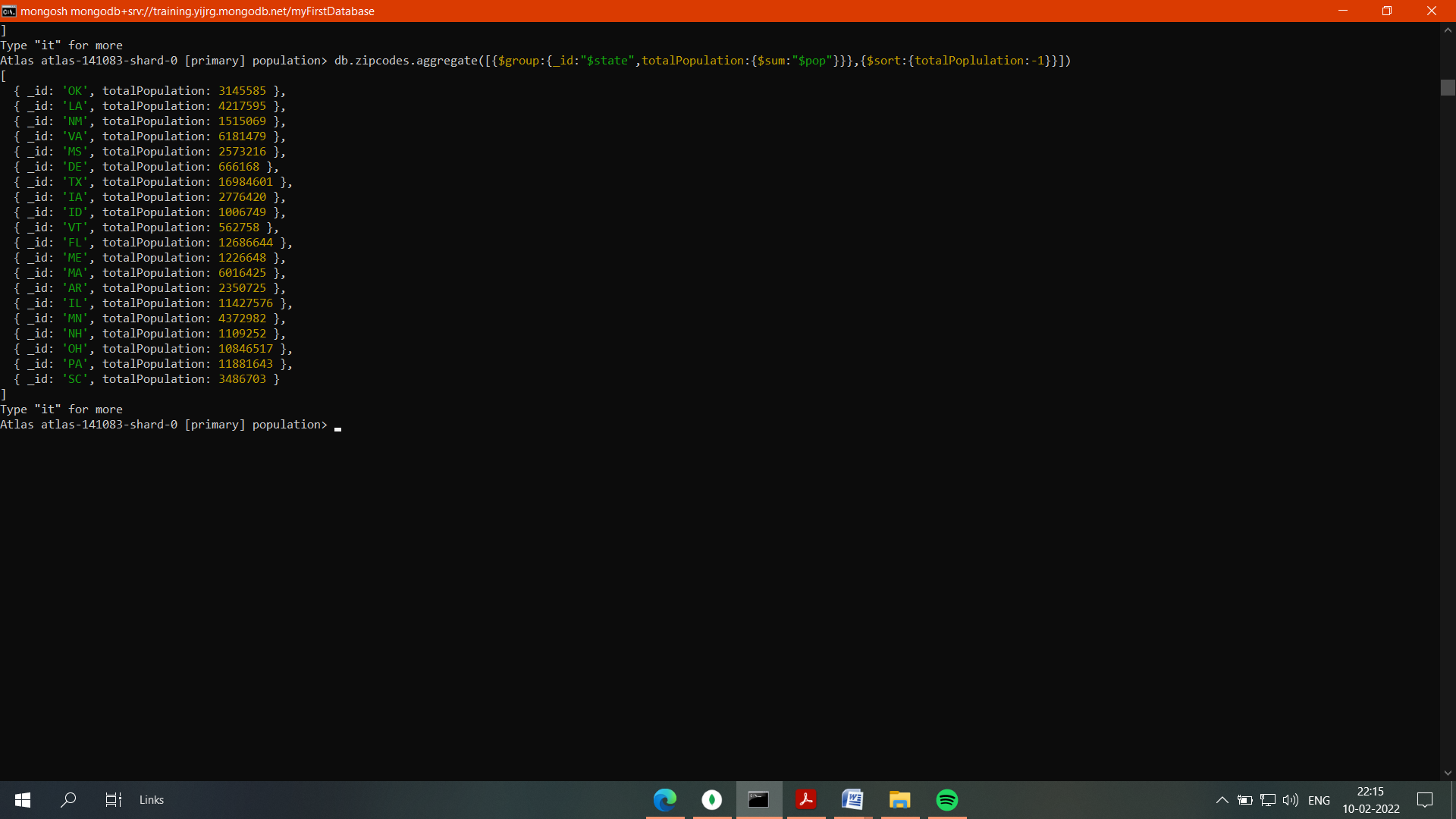
2. use db.zipcodes.aggregate with $match to do the same as above. 

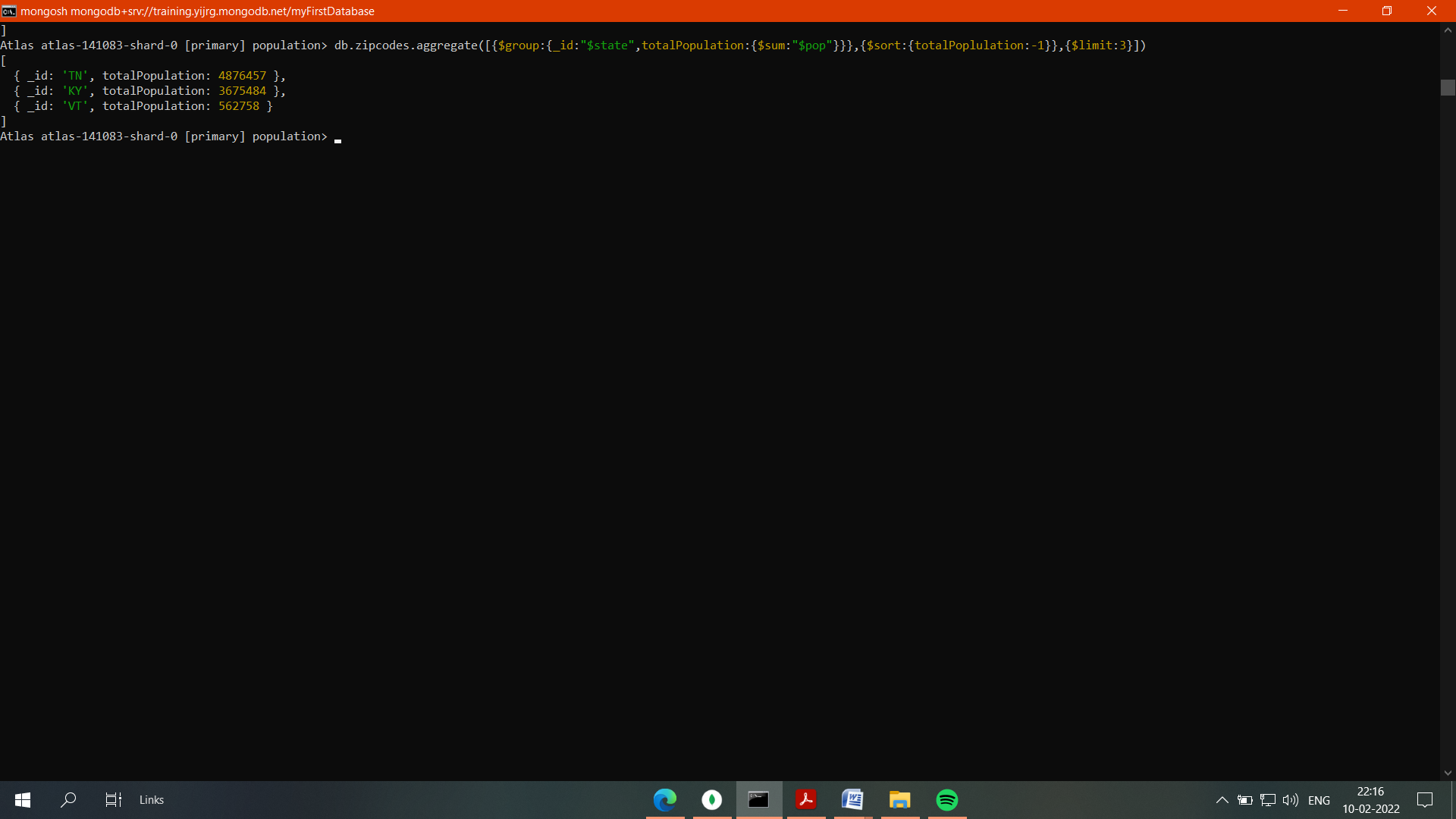
3. use $group to count the number of zip codes in Atlanta. 

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

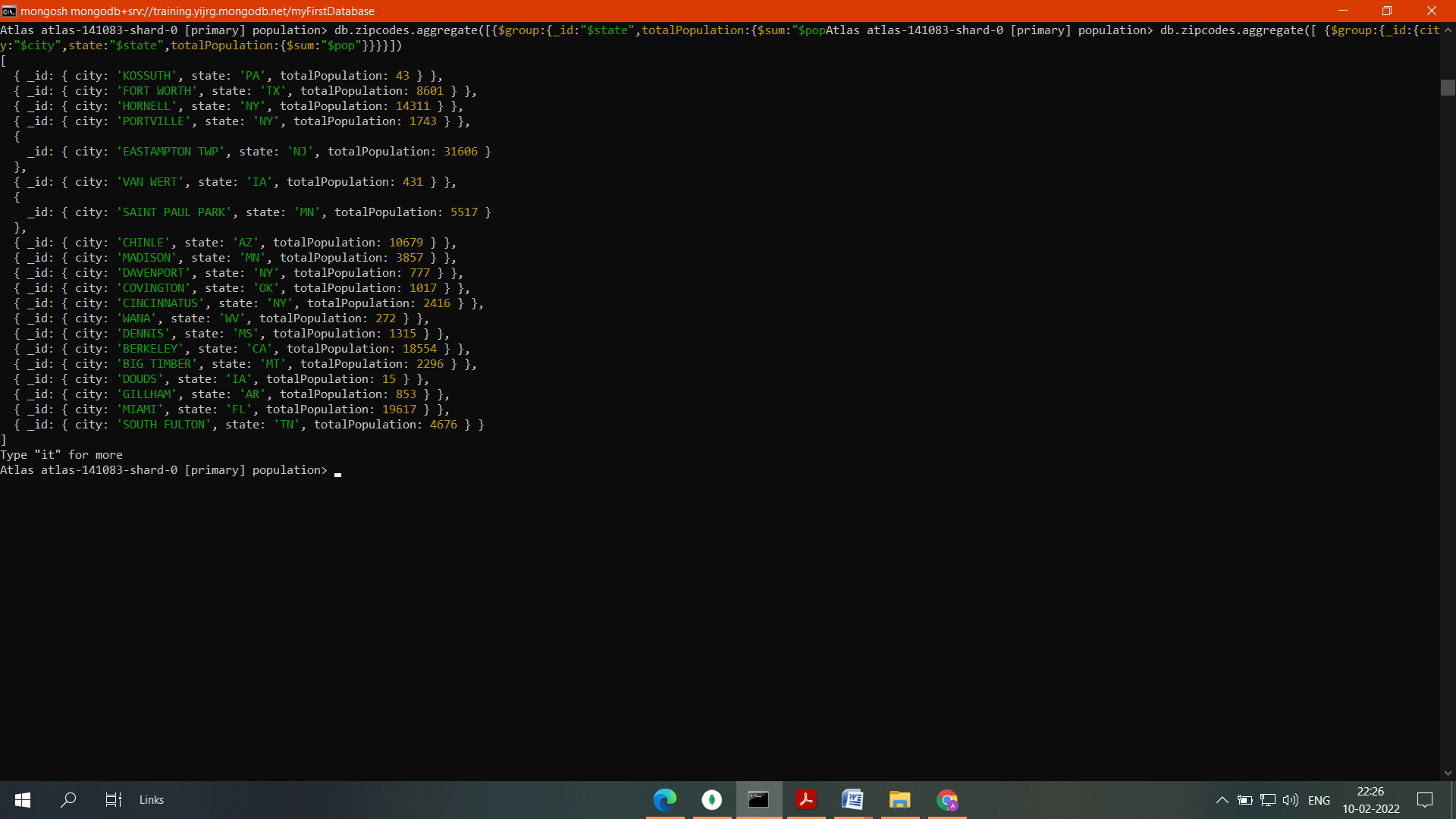
**Populations By State**

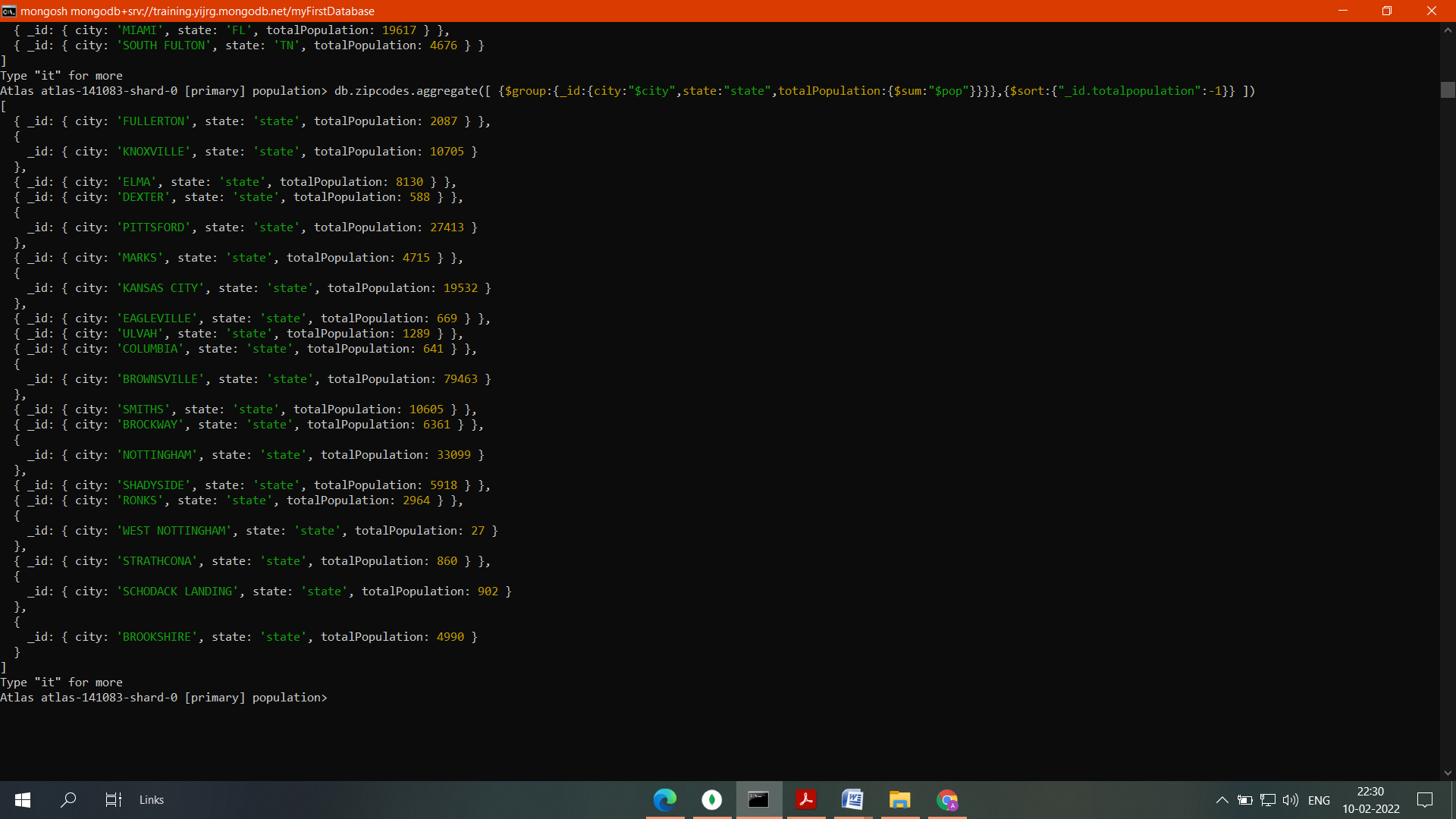
1. use aggregate to calculate the total population for each state 

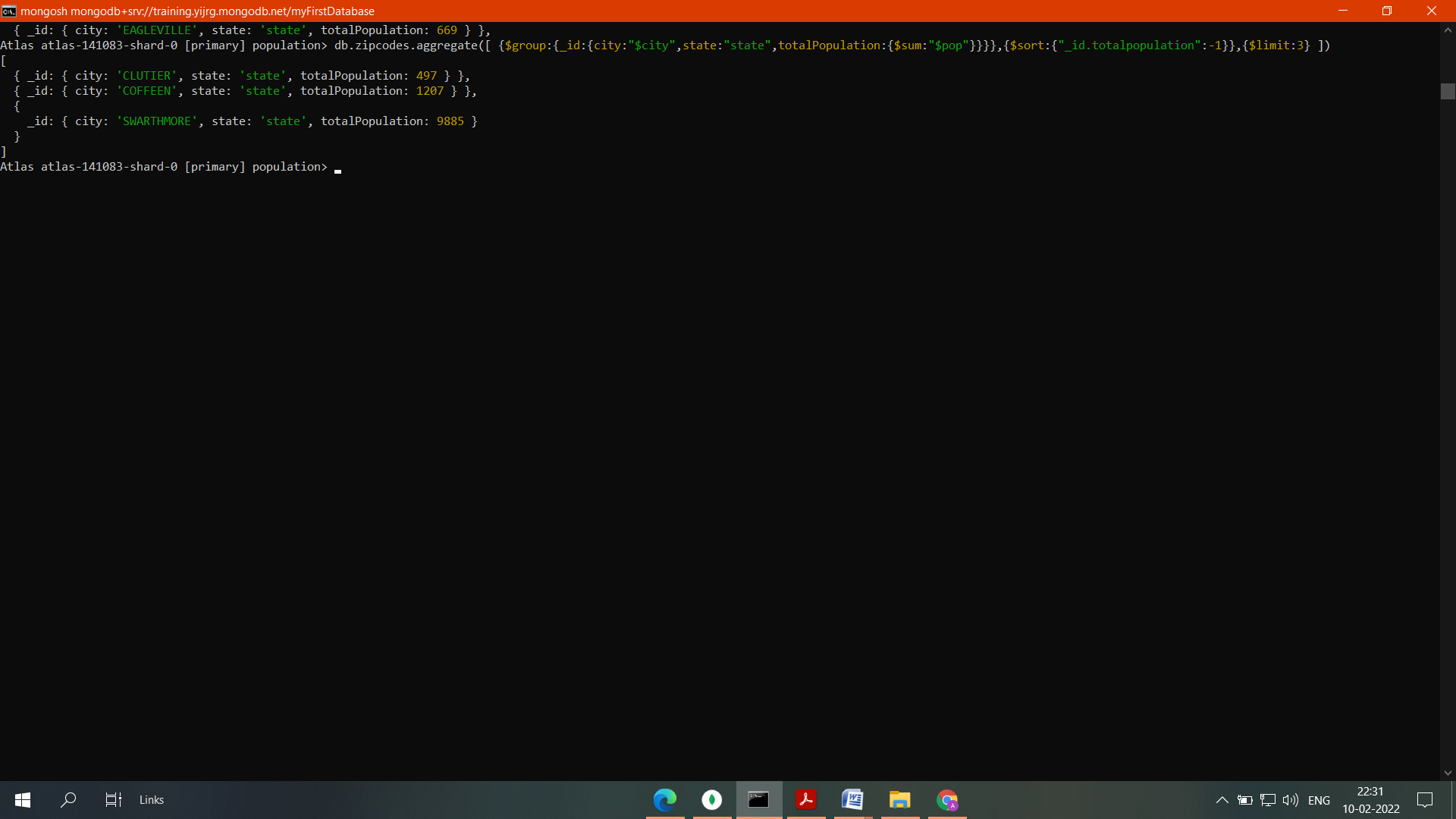
2. sort the results by population, highest first 

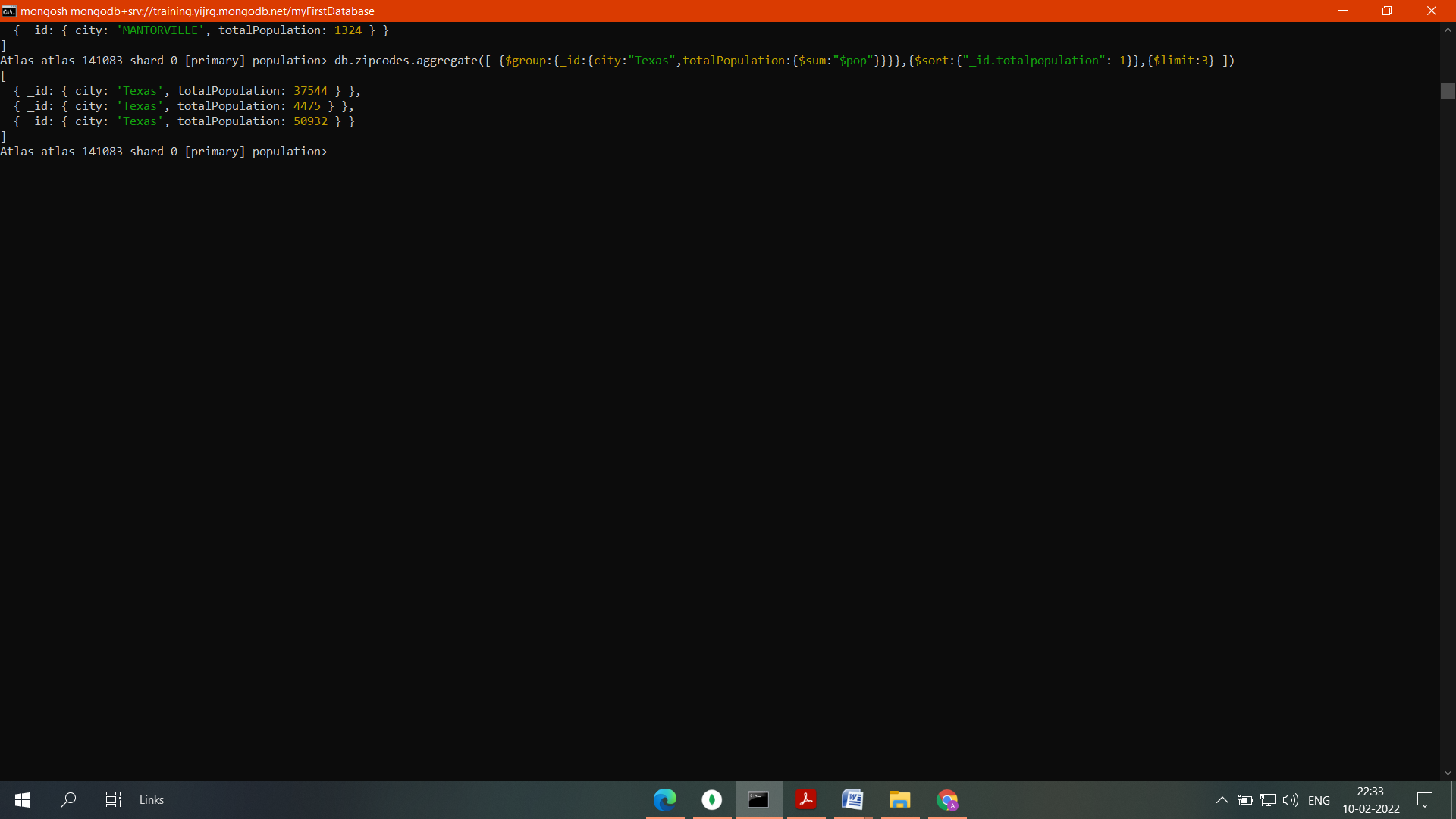
3. limit the results to just the first 3 results. What are the top 3 states in population? 

**Populations by City**

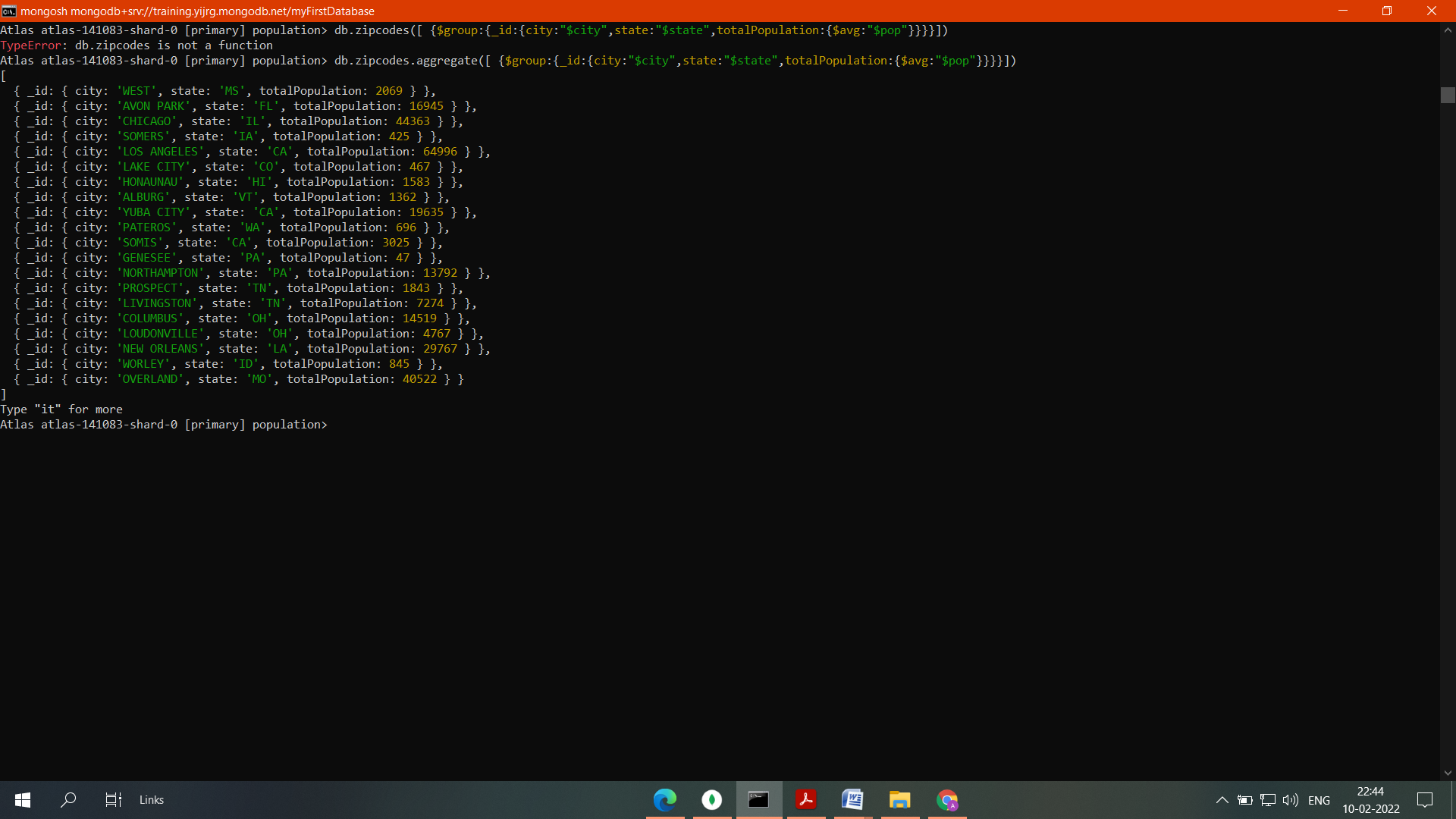
1. use aggregate to calculate the total population for each city (you have to use city/state combination). You can use a combination for the \_id of the $group: { city: '$city', state: '$state' } 

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? 

4. 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? 