Assignment #6 - MongoDB Exericses

Overview

In this assignment, you will need to download a complete file of zipcodes and population statistics from the US 2010 census and then post it to your *i6.cims.nyu.edu* account. The file is available here as [zips.json](https://cs.nyu.edu/courses/fall19/CSCI-UA.0060-001/notes/zips.json).

Source: These data can be found in *.json* format on the [MongoDB tutorials](http://media.mongodb.org/zips.json) site. You must use a ***.json***data file for this assignment.

Steps

1. Obtain and upload the .json zip codes & population count statistics file to your i6 account. Make sure the permissions are set to "644" - that is, that the file is world-readable but nobody else can edit it.
2. Start up mongo [per the instructions we have reviewed in class for using mongodb on i6](https://cs.nyu.edu/courses/fall19/CSCI-UA.0060-001/notes/dbw_readings_mongo_i6_fa19.html).
3. Import the data into your mongo database using mongoimport.

PART #1: Answer the following questions by writing queries and displaying the results. Note: The zip codes are in the "\_id" field.

*General Queries:*

1. How many zip codes are there in your home state?
2. List the five least heavily populated zipcodes (those that have the smallest populations) in Georgia. (Hint: *Be sure to exclude zip codes with a population of zero; as these data are likely to be missing or incorrect.*)
3. List the zip code and population for three zip codes in the Bronx.
4. How many zip codes are there altogether in the Continental United States (excluding Hawaii, Alaska and Puerto Rico)?
5. How many zip codes are there altogether in New York, New Jersey, and Connecticut (NY, NJ, CT)?
6. Write two additional analytic queries of your choice for any state or group of states.

*Note:* If you wish to use data of your choice, please write out substitute relevent general queries or adapt the queries above and include those queries in the comments in your submission.

Notes on Extra Credit Options:

1. Extra credit is available for using a data source of your choice. Please be sure to use a .JSON file.

**What to turn in:**

1. A transcript of your mongo session showing all of the queries and results; it should also display your netid in the Terminal (Mac) or Putty (Windows) session
2. A screen shot of your work on i6 that shows your netid and at least one of the queries above.
3. A separate text file listing the answers to each question above; please number every response with the question number above. For questions #6 and #7, please explain the goal of each query in one or two sentences.
4. your data file if you did not use the [zips.json](https://cs.nyu.edu/courses/fall19/CSCI-UA.0060-001/notes/zips.json) file