Brian Engel

Module 8 Assignment

Importing the database:

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db.research.find({"name" : "AdventNet"})

Enter MongoDB shell and switch to the companies database:





a. db.research.find({"name" : "AdventNet"}):

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b. db.research.find({"founded\_year" : 1996},{"name" : 1}).limit(10):

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List only the first 20 names of companies founded after the year 2010, ordered alphabetically.

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List only the first 20 names of companies with offices in either California or Texas, ordered by the number of employees and sorted largest to smallest.

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Design and implement a MongoDB aggregation pipeline to show the total number of offices by state for all companies that have offices in the United States.

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What I did here was to first use the unwind operator to turn the office arrays into separate documents. This way if a company has more than one office it is accounted for. Then I use the match operator to filter through all the documents to make sure the office is in the USA. Then I start to group the documents by the office state code and make the state code the new id. I also add another field for totalOffices and have it increment by 1 every time another document gets grouped with it. The project operator outputs one document for each item in the group. In mine it includes state and sets it to the state, totalOffices, and excludes the \_id. After that is went ahead and sorted the data by descending order of totalOffices. The instructions didn’t say to do this, but it seemed like it makes the data much more readable. Last of all I added a forEach to print all of the documents.