

Lab 8 Mongo 2 lab

MongoDB – Queries Database/Collection/Documents

Objective

In this Lab, you learn to create and remove MongoDB

- Databases
- Collections
- Documents

Getting Started

Open your Windows command prompt and go the following directory where MongoDB is installed:

➤ `cd C:\Program Files\MongoDB\Server\4.4\bin`

To run MongoDB, execute *mongod*

➤ `mongod`

When MongoDB starts successfully, open another Windows command prompt and go the same *bin* directory:

➤ `cd C:\Program Files\MongoDB\Server\4.4\bin`

and execute *mongo*

➤ `mongo`

This opens the command line shell where you can work with MongoDB.

Or you can create a batch file: This may have been done at the end of the install document

Create a new text file named *start_mongodb.bat* using a text editor and save the following command in it:

```
start call "C:\Program Files\MongoDB\Server\4.4\bin\mongod.exe"  
start call "C:\Program Files\MongoDB\Server\4.4\bin\mongo.exe"
```

Every time you want to run MongoDB and open the client shell, execute this file.

To test your solutions before you submit, test them individually and make sure they work correctly.

SUBMISSION:

You submission should have question listed , mongo query followed by mongo command prompt screenshot of answers. Name the file “L8_ID#_LASTNAME.docx”.

Tasks

1. In this question you create a new database named *Employees* and a collection *Product*. We store student data in this collection. Insert the Mongo data from the script file provided for employees and product. This step has to be done first to perform queries.
➤ use Employees

you will see the following ➔ switched to db employees

This command makes “employees” your current database. However, the database will not be created until you insert a document into this database.

`db.collection_name.insertOne({})` -- executing this will insert a document and the seneca will appear

Try the following to see the error message. This will be a common error when you start out

`db.collection_name.insertone({})` Can you see what the error is?

Comparison Operators in Mongo

MongoDB comparison operators can be used to compare values in a document. The following table contains the common comparison operators.

Operator	Description
<code>\$eq</code>	Matches values that are equal to the given value.
<code>\$gt</code>	Matches if values are greater than the given value.
<code>\$lt</code>	Matches if values are less than the given value.
<code>\$gte</code>	Matches if values are greater or equal to the given value.
<code>\$lte</code>	Matches if values are less or equal to the given value.
<code>\$in</code>	Matches any of the values in an array.

\$ne	Matches values that are not equal to the given value.
\$nin	Matches none of the values specified in an array.

Question 2

In the employees collection, using Mongo query display all the employee ids and emails.

Question 3

In the product collection, display all the product id, product name and list price

Question 4

In the employees collection, using Mongo query display all the employee ids, emails and manager id whose manger ids are 1,3,9.

Question 5

In the product collection, display all the product id, product name and list price whose list price are in range between 400 to 500

Question 6

In the employees collection, using Mongo query display all the employee ids, hire date and first name who are hired in August 2016.

Question 7

In the product collection, display all the product id, product name and standard cost whose standard cost are NOT in the range between 700 to 800

Question 8

In the employees collection, using Mongo query display all the data except email, phone and job title.

Question 9

In the product collection, display all the product id, product name and standard cost where products are in the list of ids (5,8,9,30,50,70,80) or the list price is above 1000

Question 10

In the employees collection, using Mongo query display all the data that has null values.

Question 11

In the product collection, update product ids 1,3 and 5 to have a new key/value pair quantity as 100 and their new list price as 1000, once updated display those product ids,product name and list price