# Lab 9 – Due by Thursday, April 11th by 4pm

# *In-Lab submission only, unless you have a permission from me to submit by e-mail. Your Word or TXT Document must have both the CODE content and the OUTPUT. You may also submit your Lab Printout to our Reception Office, Room A3058 by due date.*

# (MongoDB – Update) Change documents

## Objective

In this lab, students learn how to update documents in a MongoDB database.

**update():** This method updates one document by default. If you want to update all documents that match the criteria using this method, you need the **updateMany()**

update(<filter>,<change>)

The *filter* parameter specifies the criteria. For instance:

{“\_id”= 0} just One document with the specified \_id

{} for updating all documents

The *change* parameter specifies the changes that will be applied to a document.

**updateOne():** This method updates only the first document that matches the criteria.

updateOne(<filter>,<change>)

**updateMany():** This method updates all documents that match the criteria.

updateMany(<filter>,<change>)

## Getting Started

In this lab, you will use students.json dataset. Download students.json from Blackboard and store it in a folder named C:\data\DB. Open your Windows command prompt and go the following directory where MongoDB is installed:

* cd C:\Program Files\MongoDB\Server\5.0\**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\5.0\**bin**

and execute ***mongo***

* mongo

You will now open a Third Command Window and go to the folder where **mongimport** utility is stored and run it like shown below:

* cd C:\Program Files\MongoDB\Tools\100\bin

Execute the following command:

* mongoimport --db college --collection students C:\data\DB\students.json

After executing the command, the data is imported to the *college* database. To make sure data is imported successfully, go to the MongoDB shell and execute the following command to see the imported documents:

* show dbs

You should see the database *college* added to the list of your databases. To see the all documents inside the database:

* use college
* db.students.find().forEach(printjson) OR
* db.students.find().pretty()

## Tasks

1. Write an update statement to add new fields *program* and *term* to all documents in the *students* collection and set them to values “*CPA*” and *1*. How many modifications were made?

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1. Write an update statement to modify the value of the *program* field to “*BTM”* for all documents in the *students* collection.

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1. Write a query to show only the *program* field for the documents having field *name* equal to *Jonie Raby*.

How many documents are there with the value *Jonie Raby* for the *name* field? \_\_\_\_\_\_\_

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1. Write an update statement to modify the value of the program field to “*CPA”* for the student named *Jonie Raby*. Verify your modification by repeating Query 3.

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How many documents were updated? \_\_\_1\_\_\_\_\_

1. Write a query to show only the *term* field for documents with *\_id* value 20 or 22 or 24. Do not exclude *\_id* from the output.

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1. Write an update statement to increase the value of the *term* field by 2 for documents with *\_id* value 20,22 and 24. Verify your modification by repeating Query 5.

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1. Write an update statement to remove the *term* field from documents with value of the *term* field equal to 3. Verify your removal by using “find” function.

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