# Lab 8 – Week 10

# (MongoDB – Query)

## Objective

In this Lab, you learn to query a database in MongoDB.

## Getting Started

In this lab, you will use products.json dataset. Download products.json from Blackboard and store it in a folder named dataset.

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

* cd C:\Program Files\MongoDB\Server\4.2\**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\4.2\**bin**

and execute ***mongo***

* mongo

Or you execute a batch file to start up MongoDB.

You will import products.json to the *inventory* database. To import data, go to the *bin* directory:

* cd C:\Program Files\MongoDB\Server\4.2\**bin**

Execute the following command:

* mongoimport --db inventory --collection products --file ..\dataset\products.json

For the *json* file, provide the full path to the products.json. After executing the command, the data is imported to the inventory 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 *inventory* added to the list of your databases. To see the documents inside the database:

* use inventory
* db.products.find().forEach(printjson)

## Submission

You submit this file with answers (in the provided space). Name the file L08\_ID#\_LASTNAME.docx”.

## Tasks

1. Write a query to return *name* and *price* of each product in the *inventory* database.

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| --- |
| db.products.find({},{"name" : 1,"price" : 1, "\_id" : 0}) |

1. Write a query to return *name* and *price* for products of type *accessory* in the *inventory* database.

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| --- |
| db.products.find({"type" :{ $all: ["accessory"]}},{"\_id" : 0,"name" : 1, "price" : 1}) |

1. Write a query to return *name* and *price* for products with price between $12 and $20 (Values *12* and *20* are included).

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| db.products.find({"price" :{$gt : 12 , $lt : 20 }},{"\_id" : 0,"name" : 1,"price" : 1}) |

1. Write a query to return *id*, *name*, *price*, and *type* for products that are not of type *accessory*.

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| --- |
| db.products.find({"type" :{ $nin: ["accessory"]}},{"name" : 1, "price" : 1}) |

1. Write a query to return *id*, *name*, *price*, and type for products with type *accessory* or *service*.

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| --- |
| db.products.find({$or: [{"type" : "accessory"},{"type" : "service"}]},{"\_id" : 1,"name" : 1,"price" : 1}) |

1. Write a query to return *id*, *name*, *price*, and *type* for products that do have the *type* key.

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| --- |
| db.products.find({ "type" : {$exists: 1}},{"\_id" : 1,"name" : 1,"price" : 1}) |

1. Write a query to return *id*, *name*, *price*, and *type* for products that their type is both *accessory* and *case*.

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| --- |
| db.products.find({$and: [{"type" : "accessory"},{"type" : "case"}]},{"\_id" : 1,"name" : 1,"price" : 1}) |