1 Jan 2021 Day 1

📝 Lab 1 – MongoDB Course

Note before you start: You are totally free to use any tool you want to use as per discussed in today's session, just save the commands you did wrote in any kind of file so I can review them, **Just make sure you are running MongoDB as a background service.**
Happy Coding! 👊

1 – **Create** a new database called "iti" and create collection (**implicitly**) called "learners" and **insert one** document contains your name, age, hobbies and mail.

2 – **Insert** more than one document into "learners" collection with your friends' names, ages and email addresses **only using one command**.

3 – **Create** another collection (**explicitly**) name it "courses".

4 – **Insert 5** documents into "courses" collection describes courses' names and the name of the instructor that worked on with you on the course.

5 – **Update** your document in "learners" collection by adding a new field as an **array type field** filled with your grades.
// ex: [50, 70 , ...]

6 – **Update** your document in "learners" collection by adding new field as an **embedded document type** field filled your address.
// ex: { city: "Cairo", street: "Makram Obied", ... }

7 – **Update** all the documents in "courses" collection by adding a new field called "grade" with a value of **100**.

8 – **Update** first document on "courses" collection, make its' grade to be **higher by 20%** of others' courses grade.
// Hint: this is a little bit tricky, it maybe take two steps ;)

9 – **Update** your grades field on "learners" collection, make the **first grade** equals **20**.

10 – **Update** your address field on "learners" collection and make the city to be "Ismailia".

11 – **Delete** all the courses that have grades equals to **100** from “courses” collection**.**

12 – **Delete** the course that has a grade of **90.**

13 – **Drop** “learners” collection from “iti” database**.**

14 – **Drop** “iti” database**.**

15 – **Create** a new database name it “random” and **insert all** the documents in “Persons.json” file in “Lab” folder in a collection called “persons”**.**
// You can search about how to import JSON file on the mongoDB database, Do it and you will get a bonus! ;)

16 – **Find** all the documents in “persons” collection**,** show all the data at once and print it in a **pretty** format**.**
// Hint: Force the data to show with skipping cursor object.

17 – **Find** all the data and **show only** the fields (name**,** gender**,** and age) in “persons” collection**.**

18 – **Find** the first two persons that **have “brown” eye color only** in “persons” collection**.**

19 – **Count** the number of persons that has age **larger than 30** in “persons” collection**.**

20 – **Find** the oldest two persons in “persons” collection**.**

21 – **Find** all persons that don’t have an eye color of **brown** or **blue.**

22 – **Find** all persons that have a favorite fruit of **apple** and **strawberry.**

Let’s have a great bonus!
Solve those 2 problems and get a bonus for each, It depends only on your search abilities!

1 – **Push** a new value called “bonus” in **tags** array for the persons that have ages **between** 20 and 30 years**.**

2 – **Increment** the age of all active persons **except** “**Aurelia Gonzales**” by **one.**

The End