Lab 2 – MongoDB Course

Note: use “random” database and “persons collection to solve all aggregation problems, Please solve all problems using aggregation approach, Happy Coding! 👊

– Aggregation Problems

1 – **Find** all female persons.

2 – **Count** all **active** users.
// Use isActive field on the documents.

3 – **Group** all persons by their gender and get the **maximum** age in each gender.

4 – **Group** all persons by their **ages** and **sum** the number of persons at every certain age.
// Hint: the output should be something like that:
// {“_id:”: 27, “count”: 38}
// where 27 is a certain age and 38 are number of persons that have that age

5 – **Find average age** of males and **group** them by their company country location.

6 – **Find** the youngest male.

7 – **Find** the oldest active female.

8 – **Group** all persons by the tag name ‘excepteur’ and sum their ages.

9 – **Find** all **active females** persons and **group** them by their **favorite fruit** and **sum** number of females that love each fruit finally export the result on another collection call it “femalesFavouriteFruit”.
// search about the operator that we use to do this ;)

– Indexes Problems

10 – **Get** all indexes on the persons collection on “random” database**.**

11 – **Find** all the persons on “persons” collection on “random” database that has **age larger than** 25 and run explain method using **‘executionStats’** parameter and note the number of scanned documents**.**

12 – **Create** an index **(ascending)** using **age** field in “persons” collection on “random” database**.**

13 – **Repeat** question number 10 and compare the stats before and after creation of age index**.**

14 – **Create** a **unique** index **(ascending)** using “**index**” field on persons documents in “persons” collection**.**

15 – **Delete** all the indexes on persons collection**.**

Don’t forget: check the project file out!