

## MongoDB Lab2

1- run following queries on instructors collection:

- a- Display all documents in instructors collection
- b- Display all instructors with salaries greater than 4000 (only show firstName and salary)
- c- Display all instructors with ages less than or equal 25.
- d- Display all instructors with city mansoura and street number 10 or 14 only display (firstname,address,salary).
- e- Display all instructors who have js and jquery in their courses (both of them not one of them).
- f- Display number of courses for each instructor and display first name with number of courses.

```
mona 4
mazen 3
badr 4
ebtesam 6
noha 4
mona 4
mazen 3
ebtesam 5
```

- g- Write mongodb query to get all instructors that have firstName and lastName properties , sort them by firstName ascending then by lastName descending and finally display their data FullName and age

Note: use mongoDb sort method not javascript array method

```
FullName : badr ahmed , Age: 22
FullName : ebtesam hesham , Age: 21
FullName : ebtesam ahmed , Age: 28
FullName : mazen mohammed , Age: 21
FullName : mazen ali , Age: 30
FullName : mona mohammed , Age: 21
FullName : mona ahmed , Age: 21
FullName : noha hesham , Age: 21
```

**BONUS:** create new collection with step g values data and name it instructorsData

- h- Find all instructors that have fullName that contains "mohammed".
- i- Delete instructor with first name "ebtesam" and has only 5 courses in courses array
- j- Add active property to all instructors and set its value to true.

- k- Change "EF" course to "jquery" for "mazen mohammed" instructor  
(without knowing EF Index)
- l- Add jquery course for "noha hesham".
- m- Remove courses property for "ahmed mohammed " instructor
- n- Decrease salary by 500 for all instructors that has only 3 courses in their list (\$inc)
- o- Rename address field for all instructors to fullAddress.
- p- Change street number for noha hesham to 20