NAME :: IBRAR BABAR

ROLL NO. :: P19-0104

SECTION :: 4A

DATABASE LAB (12)

LAB TASKS

EXERCISE (1)

use 19P0104_4A

```
> use 19P0104_4A
switched to db 19P0104_4A
>
```

EXERCISE (2)

db.createCollection('cities')

db.createCollection('moviepeople_1000')

```
> db.createCollection('cities')
{ "ok" : 1 }
> db.createCollection('moviepeople_1000')
{ "ok" : 1 }
>
>
>
```

EXERCISE (3)

C:\Program Files\MongoDB\Server\4.4\bin>mongoimport --db 19P0104_4A --collection cities --file G:\cities.jsonl

```
C:\Program Files\MongoDB\Server\4.4\bin>mongoimport --db 19P0104_4A --collection cities --file  G:\cities.jsonl
2021-06-05T15:11:05.401+0500    connected to: mongodb://localhost/
2021-06-05T15:11:08.402+0500    [###################....] 19P0104_4A.cities    11.9MB/13.7MB (87.0%)
2021-06-05T15:11:08.731+0500    [######################] 19P0104_4A.cities    13.7MB/13.7MB (100.0%)
2021-06-05T15:11:08.731+0500    99838 document(s) imported successfully. 0 document(s) failed to import.

C:\Program Files\MongoDB\Server\4.4\bin>
```

C:\Program Files\MongoDB\Server\4.4\bin>mongoimport --db 19P0104_4A --collection moviepeople_1000 --file G:\moviepeople-1000.jsonl

```
C:\Program Files\MongoDB\Server\4.4\bin>mongoimport --db 19P0104_4A --collection moviepeople-1000 --file  G:\moviepeople-1000.jsonl
2021-06-05T15:13:23.761+0500    connected to: mongodb://localhost/
2021-06-05T15:13:24.506+0500    1000 document(s) imported successfully. 0 document(s) failed to import.
```

```
> use 19P0104_4A
switched to db 19P0104_4A
> show collections
cities
moviepeople_1000
>
```

EXERCISE (4(A))

 db.cities.find({timezone: "Africa/Harare"}).pretty()

This query is going to show 65 entries of Feilds. I have attached only first 3 Fields.

```
> db.cities.find({timezone:"Africa/Harare"}).pretty()
{
        "_id" : ObjectId("60bb51806dcf67e72a4ba0bd"),
        "name" : "Zvishavane",
        "country" : "ZW",
        "timezone" : "Africa/Harare",
        "population" : 35896,
        "location" : {
                "latitude" : -20.32674,
                "longitude" : 30.06648
        }
}
{
        "_id" : ObjectId("60bb51806dcf67e72a4ba0be"),
        "name" : "Victoria Falls",
        "country" : "ZW",
        "timezone" : "Africa/Harare",
        "population" : 35761,
        "location" : {
                "latitude" : -17.92353,
                "longitude" : 25.84299
        }
}
{
        "_id" : ObjectId("60bb51806dcf67e72a4ba0bf"),
        "name" : "Shangani",
        "country" : "ZW",
        "timezone" : "Africa/Harare",
        "population" : 3835,
        "location" : {
                "latitude" : -19.78333,
                "longitude" : 29.36667
        }
}
```

EXERCISE (4(B))

db.cities.find({population:{$gt:12985000}}).pretty()

```
> db.cities.find({population: {$gt:12985000}}).pretty()
{
        "_id" : ObjectId("60bb517c6dcf67e72a4a1de0"),
        "name" : "Buenos Aires",
        "country" : "AR",
        "timezone" : "America/Argentina/Buenos_Aires",
        "population" : 13076300,
        "location" : {
                "latitude" : -34.61315,
                "longitude" : -58.37723
        }
}
{
        "_id" : ObjectId("60bb517d6dcf67e72a4a41d1"),
        "name" : "Shanghai",
        "country" : "CN",
        "timezone" : "Asia/Shanghai",
        "population" : 14608512,
        "location" : {
                "longitude" : 31.22222,
                "latitude" : 121.45806
        }
}
}
>
```

EXERCISE (4(C))

db.cities.find({"location.longitude": {$eq:-58.37723}},{location:1, population:1,_id:0}).pretty()

```
> db.cities.find({"location.longitude": {$eq:-58.37723}},{location:1, population:1,_id:0}).pretty()
{
        "population" : 13076300,
        "location" : {
                "latitude" : -34.61315,
                "longitude" : -58.37723
        }
}
}
```

EXERCISE (5)

(Before updating)

db.cities.find({country:"PK" , "location.latitude":{$eq:73.2122}}).pretty()

```
> db.cities.find( {country:"PK" , "location.latitude":{$eq:73.2122}}).pretty()
{
        "_id" : ObjectId("60bb517f6dcf67e72a4b2449"),
        "name" : "Malakwal City",
        "country" : "PK",
        "timezone" : "Asia/Karachi",
        "population" : 35000,
        "location" : {
                "longitude" : 32.55492,
                "latitude" : 73.2122
        }
}
```

db.cities.updateOne(

... {country:"PK", "location.latitude":{$eq:73.2122},population:35000},

... {

... $set: {population:55000}

... }

...)

```
> db.cities.updateOne(
... {country:"PK", "location.latitude":{$eq:73.2122},population:35000},
... {
... $set: {population:55000}
... }
... )
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

(After updating)

db.cities.find({country:"PK" , "location.latitude":{$eq:73.2122}}).pretty()

```
> db.cities.find( {country:"PK" , "location.latitude":{$eq:73.2122}}).pretty()
{
        "_id" : ObjectId("60bb517f6dcf67e72a4b2449"),
        "name" : "Malakwal City",
        "country" : "PK",
        "timezone" : "Asia/Karachi",
        "population" : 55000,
        "location" : {
                "longitude" : 32.55492,
                "latitude" : 73.2122
        }
}
>
```

EXERCISE (6)

db.cities.deleteOne({timezone:"Asia/Karachi",country:"PK"})

```
> db.cities.deleteOne({timezone:"Asia/Karachi",country:"PK"})
{ "acknowledged" : true, "deletedCount" : 1 }
>
```

EXERCISE (7)

db.moviepeople_1000.find({"info.birthname":["Freeman, Crispin McDougal"]}).pretty()

```
> db.moviepeople_1000.find({"info.birthname":["Freeman, Crispin McDougal"]}).pretty()
{
        "_id" : ObjectId("60bb51da79b12c72cf65cae3"),
        "person-name" : "Freeman, Crispin",
        "info" : {
                "quotes" : [
                        "On advice to aspiring voice-over actors: For myself, I'm in the favor of the more versatile kind of voice who can do all sorts of roles and tra
nsform. But to do that you have to have chops, and the best way to get them is through the classics, especially Shakespeare. It teaches you a lot about breathing, and i
dea and intention and rhythm. He's written the characters into the very poetry of the language, and if you try to get into and match his poetry it will take you out of
your normal language patterns and that's the beginning of creating a character, not playing your mundane, everyday self. It's so verbally based, and in voice-acting, al
l you've got is your voice."
                ],
                "trivia" : [
                        "Said he was a little nervous about taking on the role of Zelgadis in Slayers because the character had already been voiced by someone else. Whe
n it came to reinterpretting the character, he said he thought that Zelgadis had more of an axe to grind.",
                        "Fluent in English and Spanish.",
                        "Is a big fan of authors 'William Shakespeare (I)' (qv), 'J.R.R. Tolkien' (qv), 'Joseph Campbell (III)' (qv), 'Marshall McLuhan' (qv), and 'Will
iam Gibson (II)' (qv).",
                        "Is a big fan of anime creators 'Hayao Miyazaki' (qv) and 'Osamu Tezuka (I)' (qv).",
                        "Frequently does voice overs for various union and non-union voice production companies for some video games and mostly animes.",
                        "Has a younger brother, 'Clark Freeman' (qv), and a younger sister, 'Cassidy Freeman' (qv).",
                        "Graduated from Williams College with a B.A. in theater & a minor in computer science",
                        "Graduated from Columbia University with an M.F.A. in acting",
                        "Is one of the only English-speaking voice actors to voice the same character of all Xenosaga video game series. Crispin was the only voice acto
r to provide the English voice of Albedo and Gaignun Kukai of the series.",
                        "On August 11, 2007, he married 'Izobel Carol' (qv) on The Big Island of Hawaii.",
                        "He and Veronica Taylor both came to the anime Slayers series as replacements - she replaced Joani Baker as Amelia and he replaced Daniel Cronin
 as Zelgadis."
                ],
                "minibiography" : [
                        "Crispin is the oldest of three. He has a younger brother, Clark, and youngest sister, Cassidy. All three attended the Latin School of Chicago,
where Crispin graduated in a class of 60 in 1990. Crispin had a Mac in 1985. To this day he is still an avid computer geek. He played no official team sports in school,
 but participated in ad hoc football played in Lincoln Park. Crispin was an active participant in many school plays both on and behind stage. He's also a genuinely nice
 and humble person."
                ],
                "birthnotes" : [
```

```
                "birthnotes" : [
                        "Chicago, Illinois, USA"
                ],
                "birthdate" : [
                        "9 February 1972"
                ],
                "height" : [
                        "6' 2"
                ],
                "spouse" : [
                        "'Izobel Carol' (qv) (11 August 2007 - present)"
                ],
                "birthname" : [
                        "Freeman, Crispin McDougal"
                ]
        }
}
>
```