LAB # 13:

Exercises:

1): `db.Cities.find({population:{$lt:30,$ne:0}}).limit(2).pretty()`

```
>
> db.Cities.find({population:{$lt:30,$ne:0}}).limit(2).pretty()
{
        "_id" : ObjectId("6284ca0c694facf94064c276"),
        "name" : "Tanggul",
        "country" : "ID",
        "timezone" : "Asia/Jakarta",
        "population" : 3,
        "location" : {
                "latitude" : -8.1645,
                "longitude" : 113.4525
        }
}
{
        "_id" : ObjectId("6284ca0d694facf94065000f"),
        "name" : "Ereencav",
        "country" : "MN",
        "timezone" : "Asia/Choibalsan",
        "population" : 23,
        "location" : {
                "longitude" : 49.8807,
                "latitude" : 115.72526
        }
}
>
```

2): `db.Cities.count({timezone : "Asia/Jakarta"})`

```
> db.Cities.count({timezone : "Asia/Jakarta"})
1430
>
```

3): `db.Cities.find({country : "PK",timezone:"Asia/Karachi"}).sort({population:-1}).forEach(printjson)`

Note:

It is going to print 423 docs.

```
db.cities.find({country : "PK",timezone:"Asia/Karachi"}).sort({population:-1}).forEach(printjson)

     "_id" : ObjectId("60c46d4a95da44e07b6918a1"),
     "name" : "Karachi",
     "country" : "PK",
     "timezone" : "Asia/Karachi",
     "population" : 11624219,
     "location" : {
            "longitude" : 24.9056,
            "latitude" : 67.0822
     }


     "_id" : ObjectId("60c46d4a95da44e07b691875"),
     "name" : "Lahore",
     "country" : "PK",
     "timezone" : "Asia/Karachi",
     "population" : 6310888,
     "location" : {
            "longitude" : 31.54972,
            "latitude" : 74.34361
     }


     "_id" : ObjectId("60c46d4a95da44e07b6918f2"),
```
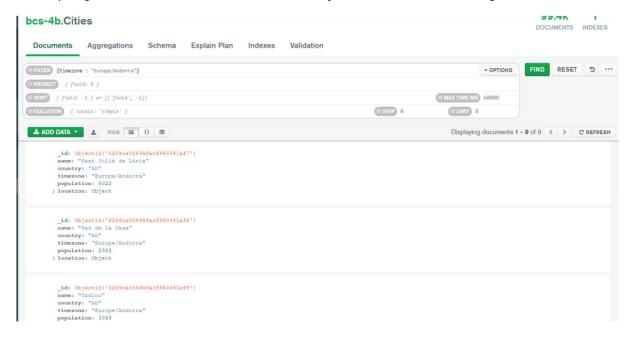
4):

```
db.Cities.getIndexes() db.Cities.createIndex({population:1})
db.Cities.dropIndex({population:1})
```

```
>
>
> db.Cities.getIndexes()
[ { "v" : 2, "key" : { "_id" : 1 }, "name" : "_id_" } ]
> db.Cities.createIndex({population:1})
{
       "numIndexesBefore" : 1,
       "numIndexesAfter" : 2,
       "createdCollectionAutomatically" : false,
       "ok" : 1
}
> db.Cities.dropIndex({population:1})
{ "nIndexesWas" : 2, "ok" : 1 }
>
```
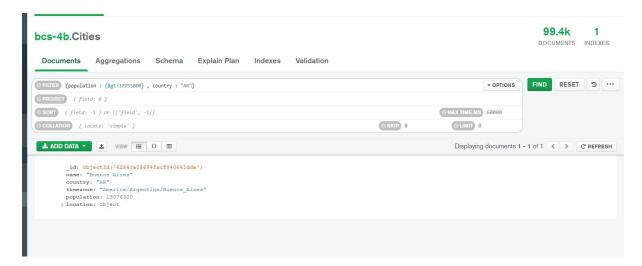
MongoDB Compass Tasks:

5:

i) {timezone : "Europe/Andorra"}

ii) {population : {$gt:12955000} , country : "AR"}

iii) Filter:

{"location.longitude":{$eq:1.6}}

Project:

`{location:1,population:1,_id:0}`

bcs-4b.Cities

99.4k DOCUMENTS   **1** INDEXES

Documents   Aggregations   Schema   Explain Plan   Indexes   Validation

FILTER `{"location.longitude":{$eq:1.6}}`   ▾ OPTIONS   FIND   RESET   ↺   ⋯

PROJECT `{location:1,population:1,_id:0}`

SORT `{ field: -1 } or [['field', -1]]`   MAX TIME MS `60000`

COLLATION `{ locale: 'simple' }`   SKIP `0`   LIMIT `0`

VIEW ☰ {} ⊞   Displaying documents 1 - 2 of 2 < > ⟳ REFRESH

```
population: 73176
v location: Object
    longitude: 1.6
    latitude: 103.65
```

```
population: 75350
v location: Object
    longitude: 1.6
    latitude: 103.81667
```