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Roll No : p190053

Section : BSCS(5A)

Lab No : 13

Question No 1:

```
> db.cities.find({population:{$lt:30,$ne:0}}).limit(2)
< { _id: ObjectId("627e375b7f4aaa8382cde61a"),
    name: 'Tanggul',
    country: 'ID',
    timezone: 'Asia/Jakarta',
    population: 3,
    location: { latitude: -8.1645, longitude: 113.4525 } }
  { _id: ObjectId("627e375c7f4aaa8382ce23b3"),
    name: 'Ereencav',
    country: 'MN',
    timezone: 'Asia/Choibalsan',
    population: 23,
    location: { longitude: 49.8807, latitude: 115.72526 } }
```

Question No 2:

```
> db.cities.find({timezone:'Asia/Jakarta'}).count()
< 1430
```

Question No 3:

```
> db.cities.find({country:"PK"},{timezone:"Asia/karachi"}).sort({population:-1});
< { _id: ObjectId("62877215b12c5cf7bafde478"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde44c"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde4c9"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde3eb"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde422"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde4a3"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde4b5"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde402"),
    timezone: 'Asia/karachi' }
  { _id: ObjectId("62877215b12c5cf7bafde3f5"),
```

Question No 4:

```
> db.cities.createIndex({population:1})
< 'population_1'
> db.cities.dropIndex({population:1})
< { nIndexesWas: 2, ok: 1 }
```

Question No 5:

Documents　Aggregations　Schema　Explain Plan　Indexes　Validation

FILTER {timezone:"Europe/Andorra"}　　　　　　　　　　　　▸ OPTIONS　FIND　RESET

ADD DATA ▾　⬆　VIEW　▤　{}　⊞　　　　　　　Displaying documents 1 - 9 of 9　‹ ›　C

▸　_id: ObjectId('62877211b12c5cf7bafcdbeb')
　　name: "Sant Juliá de Lória"
　　country: "AD"
　　timezone: "Europe/Andorra"
　　population: 8022
　› location: Object

　　_id: ObjectId('62877211b12c5cf7bafcdbec')
　　name: "Pas de la Casa"
　　country: "AD"
　　timezone: "Europe/Andorra"
　　population: 2363
　› location: Object

　　_id: ObjectId('62877211b12c5cf7bafcdbed')
　　name: "Ordino"
　　country: "AD"
　　timezone: "Europe/Andorra"
　　population: 3066

Documents　Aggregations　Schema　Explain Plan　Inde

FILTER {population:{$gt :12955000},country:"AR"}

ADD DATA ▾　⬆　VIEW　▤　{}　⊞

　　_id: ObjectId('62877211b12c5cf7bafcdece')
　name: "Buenos Aires"
　country: "AR"
　timezone: "America/Argentina/Buenos_Aires"
　population: 13076300
　› location: Object

Documents   Aggregations   Schema   Explain Plan   Indexes   Validation

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

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

SORT `{ field: -1 } or [['field', -1]]`

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

VIEW ☰ {} ▦

```
_id: ObjectId('62877215b12c5cf7bafdc962')
population: 73176
location: Object
    longitude: 1.6
    latitude: 103.65


_id: ObjectId('62877215b12c5cf7bafdc9cf')
population: 75350
location: Object
    longitude: 1.6
    latitude: 103.81667
```