



mongoDB

## ***Proyecto MongoDB***

*GESTIÓN DE BASES DE DATOS*

*GONZALO PEÑA CALERO | 1ºASIR | 18/05/2022*

Bien, en este proyecto de MMongoDB vamos a ver como tenemos nuestro json y como importarlo dentro de la base de datos de mongo, y cuando tengamos eso hecho vamos a proceder a realizar unos cuantos de ejercicios para después proceder a hacer las consultas.

Empezaremos por lo ejercicios, que en este caso serán 4 con sus subapartados correspondientes.

## **EJERCICIOS:**

### 1 Importar con mongoimport el correspondiente json

Primero como no la sintaxis de nuestro comando

```
mongoimport --db rick --collection rick --jsonArray --file rick.json
```

Tras la aplicación del comando en nuestra terminal.

NOTA: Este comando se ejecuta fuera de la base de datos de mongo.

```
gonzalopc23@debian-gonzalo:~$ mongoimport --db rick --collection rick --jsonArray --file rick.json
2022-05-18T08:37:14.439+0200    connected to: mongodb://localhost/
2022-05-18T08:37:14.445+0200    58 document(s) imported successfully. 0 document(s) failed to import.
```

### 2 Insertar con insertOne y insertMany varios documentos.

#### 2.1 insertOne

Siguiendo la estructura de antes primero la sintaxis del comando.

```
db.rick.insertOne({
  "id": 2286140,
  "url": "https://www.tvmaze.com/search?q=morty",
  "name": "Morty1",
  "season": 2,
  "number": 7,
  "type": "regular",
  "airdate": "2021-04-12",
  "airtime": "17:00",
  "airstamp": "2021-04-10T21:00:00+00:00",
  "runtime": 15,
  "rating": {
    "average": null
  },
  "image": null,
  "summary": null,
  "_links": {
    "self": {
      "href": "https://api.tvmaze.com/episodes/2286140"
    }
  }
})
```

Tras la ejecución del tal ya dentro de la base de datos de mongo.

```
> db.rick.insertOne({
...   "id": 2286140,
...   "url": "https://www.tvmaze.com/search?q=morty",
...   "name": "Morty1",
...   "season": 2,
...   "number": 7,
...   "type": "regular",
...   "airdate": "2021-04-12",
...   "airtime": "17:00",
...   "airstamp": "2021-04-10T21:00:00+00:00",
...   "runtime": 15,
...   "rating": {
...     "average": null
...   },
...   "image": null,
...   "summary": null,
...   "_links": {
...     "self": {
...       "href": "https://api.tvmaze.com/episodes/2286140"
...     }
...   }
... })
{
  "acknowledged" : true,
  "insertedId" : ObjectId("62849483f83b118ed59bae24")
}
```

## 2.2 insertMany

Primero como siempre ya que siempre vamos a seguir esta estructura, la sitaxis.

NOTA: Aquí hay que tener cuidado con la coma del medio ya que me ha dado problemas por no haberla puesto.

```

db.rick.insertMany(
  [
    {
      "id": 2286141,
      "url": "https://www.tvmaze.com/search?q=morty2",
      "name": "Morty2",
      "season": 4,
      "number": 8,
      "type": "regular",
      "airdate": "2021-04-13",
      "airtime": "17:00",
      "airstamp": "2021-04-10T21:00:00+00:00",
      "runtime": 15,
      "rating": {
        "average": null
      },
      "image": null,
      "summary": null,
      "_links": {
        "self": {
          "href": "https://api.tvmaze.com/episodes/2286141"
        }
      }
    },
    {
      "id": 2286142,
      "url": "https://www.tvmaze.com/search?q=morty3",
      "name": "Morty3",
      "season": 2,
      "number": 7,
      "type": "regular",
      "airdate": "2021-04-14",
      "airtime": "17:00",
      "airstamp": "2021-04-10T21:00:00+00:00",
      "runtime": 15,
      "rating": {
        "average": null
      },
      "image": null,
      "summary": null,
      "_links": {
        "self": {
          "href": "https://api.tvmaze.com/episodes/2286142"
        }
      }
    }
  ]
)

```

Tras la sintaxis, la ejecución.

```
> use rick
switched to db rick
> db.rick.insertMany(
...   [
...     {
...       "id": 2286141,
...       "url": "https://www.tvmaze.com/search?q=morty2",
...       "name": "Morty2",
...       "season": 4,
...       "number": 8,
...       "type": "regular",
...       "airdate": "2021-04-13",
...       "airtime": "17:00",
...       "airstamp": "2021-04-10T21:00:00+00:00",
...       "runtime": 15,
...       "rating": {
...         "average": null
...       },
...       "image": null,
...       "summary": null,
...       "_links": {
...         "self": {
...           "href": "https://api.tvmaze.com/episodes/2286141"
...         }
...       }
...     },
...     {
...       "id": 2286142,
...       "url": "https://www.tvmaze.com/search?q=morty3",
...       "name": "Morty3",
...       "season": 2,
...       "number": 7,
...       "type": "regular",
...       "airdate": "2021-04-14",
...       "airtime": "17:00",
...       "airstamp": "2021-04-10T21:00:00+00:00",
...       "runtime": 15,
...       "rating": {
...         "average": null
...       },
...       "image": null,
...       "summary": null,
...       "_links": {
...         "self": {
...           "href": "https://api.tvmaze.com/episodes/2286142"
...         }
...       }
...     }
...   ])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("6284950ef83b118ed59bae25"),
    ObjectId("6284950ef83b118ed59bae26")
  ]
}
```

### 3 Eliminar documentos utilizando deleteOne y deleteMany

#### 3.1 deleteOne

Sintaxis.

```
db.rick.deleteOne({"id":2286140})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.deleteOne({"id":2286140})
{ "acknowledged" : true, "deletedCount" : 1 }
> □
```

#### 3.2 deleteMany

Sintaxis.

```
db.rick.deleteMany({"airtime": "10:30"})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.deleteMany({"airtime": "10:30"})
{ "acknowledged" : true, "deletedCount" : 5 }
> □
```

### 4 Actualizar documentos utilizando updateOne, updateMany y replaceOne

#### 4.1 updateOne

Sintaxis.

```
db.rick.updateOne({"id":2286142},{ $set:{"season": 3}})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.updateOne({"id":2286142},{ $set:{"season": 3}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> □
```

#### 4.2 updateMany

Sintaxis.

```
db.rick.updateMany({"runtime": 15},{$set:{"runtime": 14}})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.updateMany({"runtime": 15},{$set:{"runtime": 14}})
{ "acknowledged" : true, "matchedCount" : 55, "modifiedCount" : 55 }
> □
```

#### 4.3 replaceOne

Sintaxis.

```
db.rick.replaceOne({"name": "Morty3"},{"airtime": "17:05"})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.replaceOne({"name": "Morty3"},{"airtime": "17:05"})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> □
```

## CONSULTAS:

### 5 consultas de datos simples:

1 Busca el personcapituloaje cuyo nombre es Zoom Encounters y tiene hora de salida del episodio (airtime) a las 10:45.

Sintaxis.

```
db.rick.find({"name":"Zoom Encounters"},{"airtime": "10:45"})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"name":"Zoom Encounters"},{"airtime": "10:45"})
{ "_id" : ObjectId("6284941a29787dffd75a810e"), "airtime" : "10:45" }
> □
```

2 Obtener los 4 primeros capitulos que empiezen por R.

Sintaxis.

```
db.rick.find({"name":/R/},{ "name":1}).limit(4)
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"name":/R/},{ "name":1}).limit(4)
{ "_id" : ObjectId("6283d6737516746436d7c373"), "name" : "Ricky Zoom" }
{ "_id" : ObjectId("6284941a29787dffd75a80fb"), "name" : "Ricky Wobbles" }
{ "_id" : ObjectId("6284941a29787dffd75a80fc"), "name" : "Ricky's Role Model" }
{ "_id" : ObjectId("6284941a29787dffd75a80fd"), "name" : "Ricky Blows Away the Competition" }
> □
```



### 3 Contar los capítulos con runtime menor de 16 y de type regular.

Sintaxis.

```
db.rick.find({"type":"regular"},{"runtime":{"$lt:16}}).count()
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"type":"regular"},{"runtime":{"$lt:16}}).count()
54
> □
```

### 4 Mostrar los capítulos cuyo type sea las regular.

Sintaxis.

```
db.rick.find({"type": "regular"}, {"name":1})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"type": "regular"}, {"name":1})
{ "_id" : ObjectId("6284941a29787dffd75a80f9"), "name" : "Flat Out Awesome" }
{ "_id" : ObjectId("6284941a29787dffd75a80fa"), "name" : "The Wheelford Wheeler" }
{ "_id" : ObjectId("6284941a29787dffd75a80fb"), "name" : "Ricky Wobbles" }
{ "_id" : ObjectId("6284941a29787dffd75a80fc"), "name" : "Ricky's Role Model" }
{ "_id" : ObjectId("6284941a29787dffd75a80fd"), "name" : "Ricky Blows Away the Competition" }
{ "_id" : ObjectId("6284941a29787dffd75a80fe"), "name" : "New Bike On the Block" }
{ "_id" : ObjectId("6284941a29787dffd75a80ff"), "name" : "Starring Ricky" }
{ "_id" : ObjectId("6284941a29787dffd75a8100"), "name" : "The New Rescue Tool" }
{ "_id" : ObjectId("6284941a29787dffd75a8101"), "name" : "Blip Delivers" }
{ "_id" : ObjectId("6284941a29787dffd75a8102"), "name" : "True Loopness" }
{ "_id" : ObjectId("6284941a29787dffd75a8103"), "name" : "Tired and True" }
{ "_id" : ObjectId("6284941a29787dffd75a8104"), "name" : "Scootio Changes Lanes" }
{ "_id" : ObjectId("6284941a29787dffd75a8105"), "name" : "Little Buster Bunker" }
{ "_id" : ObjectId("6284941a29787dffd75a8106"), "name" : "The Most Amazing Thing Put in a Box Ever" }
{ "_id" : ObjectId("6284941a29787dffd75a8107"), "name" : "The Out of Controller" }
{ "_id" : ObjectId("6284941a29787dffd75a8108"), "name" : "Ricky's Rescue Coaching Badge" }
{ "_id" : ObjectId("6284941a29787dffd75a810a"), "name" : "Two Wheel Justice" }
{ "_id" : ObjectId("6284941a29787dffd75a810b"), "name" : "Time Capsule" }
{ "_id" : ObjectId("6284941a29787dffd75a810e"), "name" : "Zoom Encounters" }
{ "_id" : ObjectId("6284941a29787dffd75a810f"), "name" : "SantaCycle Down" }
Type "it" for more
> □
```

### 5 Obtener de menor a mayor los airdate cuyo number este entre 25 y 39.

Sintaxis.

```
db.rick.find({"number":{"$gte:25,$lte:39}},{"airdate":1}).sort({"airdate":1})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"number":{"$gte:25,$lte:39}},{"airdate":1}).sort({"airdate":1})
{ "_id" : ObjectId("6284941a29787dff75a810e"), "airdate" : "2019-10-25" }
{ "_id" : ObjectId("6284941a29787dff75a810f"), "airdate" : "2019-12-06" }
{ "_id" : ObjectId("6284941a29787dff75a8110"), "airdate" : "2019-12-06" }
{ "_id" : ObjectId("6284941a29787dff75a812a"), "airdate" : "2020-01-13" }
{ "_id" : ObjectId("6284941a29787dff75a8113"), "airdate" : "2020-01-14" }
{ "_id" : ObjectId("6284941a29787dff75a8115"), "airdate" : "2020-01-15" }
{ "_id" : ObjectId("6284941a29787dff75a8114"), "airdate" : "2020-01-16" }
{ "_id" : ObjectId("6284941a29787dff75a8116"), "airdate" : "2020-01-17" }
{ "_id" : ObjectId("6284941a29787dff75a8117"), "airdate" : "2020-03-09" }
{ "_id" : ObjectId("6284941a29787dff75a811b"), "airdate" : "2020-03-10" }
{ "_id" : ObjectId("6284941a29787dff75a8119"), "airdate" : "2020-03-11" }
{ "_id" : ObjectId("6284941a29787dff75a8118"), "airdate" : "2020-03-12" }
{ "_id" : ObjectId("6284941a29787dff75a811c"), "airdate" : "2020-03-13" }
{ "_id" : ObjectId("6284941a29787dff75a811d"), "airdate" : "2020-05-18" }
> □
```

### 3 consultas con arrays.

#### 6 Crear un array en el capítulo con id 1853149 donde podamos almacenar la crítica, que en este caso será "excelente", "buena" e "interesante".

Sintaxis.

```
db.rick.update({"id": 1853149 },{$push:{"critics":["excellent", "good", "interesting"]}})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.update({"id": 1853149 },{$push:{"critics":["excellent", "good", "interesting"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> □
```

**7 Actualiza el airdate del día 22 al 23 del id 1853145.**

Sintaxis.

```
db.rick.update({"id":1853145},{ $push:[airdate:{$each:"2020-05-23"}]})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.update({"id":1853145},{ $push:[airdate:{$each:"2020-05-23"}]})
...
...
> □
```

**8 Eliminar el runtime y dejarlo como null del capítulo cuyo nombre es "The Scootbop Bop".**

Sintaxis.

```
db.rick.update({"name":"The Scootbop Bop"},{ $push:[runtime:{$each:[null]}]})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.update({"name":"The Scootbop Bop"},{ $push:[runtime:{$each:[null]}]})
WriteResult({
  "nMatched" : 0,
  "nUpserted" : 0,
  "nModified" : 0,
  "writeError" : {
    "code" : 2,
    "errmsg" : "The field 'runtime' must be an array but is of type double in document {_id:
ObjectId('6284941a29787dffd75a812e')}"
  }
})
>
> □
```

### 3 consultas con documentos embebidos.

#### 9 Obtener todos los id que aparezcan entre las horas del airtime 10:30 y 12:30.

Sintaxis.

```
db.rick.find({"airtime":"10:30-12:30"}, {"id":1})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"airtime":"10:30-17:00"}, {"id":1})
>
> []
```

#### 10 Obtener todos los capitulos cuyo type sea regular.

Sintaxis.

```
db.rick.find({"type":"regular"}, {"name":1})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.find({"type":"regular"}, {"name":1})
{ "_id" : ObjectId("6284941a29787dffd75a80f9"), "name" : "Flat Out Awesome" }
{ "_id" : ObjectId("6284941a29787dffd75a80fa"), "name" : "The Wheelford Wheeler" }
{ "_id" : ObjectId("6284941a29787dffd75a80fb"), "name" : "Ricky Wobbles" }
{ "_id" : ObjectId("6284941a29787dffd75a80fc"), "name" : "Ricky's Role Model" }
{ "_id" : ObjectId("6284941a29787dffd75a80fd"), "name" : "Ricky Blows Away the Competition" }
{ "_id" : ObjectId("6284941a29787dffd75a80fe"), "name" : "New Bike On the Block" }
{ "_id" : ObjectId("6284941a29787dffd75a80ff"), "name" : "Starring Ricky" }
{ "_id" : ObjectId("6284941a29787dffd75a8100"), "name" : "The New Rescue Tool" }
{ "_id" : ObjectId("6284941a29787dffd75a8101"), "name" : "Blip Delivers" }
{ "_id" : ObjectId("6284941a29787dffd75a8102"), "name" : "True Loopness" }
{ "_id" : ObjectId("6284941a29787dffd75a8103"), "name" : "Tired and True" }
{ "_id" : ObjectId("6284941a29787dffd75a8104"), "name" : "Scootio Changes Lanes" }
{ "_id" : ObjectId("6284941a29787dffd75a8105"), "name" : "Little Buster Bunker" }
{ "_id" : ObjectId("6284941a29787dffd75a8106"), "name" : "The Most Amazing Thing Put in a Box Ever" }
{ "_id" : ObjectId("6284941a29787dffd75a8107"), "name" : "The Out of Controller" }
{ "_id" : ObjectId("6284941a29787dffd75a8108"), "name" : "Ricky's Rescue Coaching Badge" }
{ "_id" : ObjectId("6284941a29787dffd75a810a"), "name" : "Two Wheel Justice" }
{ "_id" : ObjectId("6284941a29787dffd75a810b"), "name" : "Time Capsule" }
{ "_id" : ObjectId("6284941a29787dffd75a810e"), "name" : "Zoom Encounters" }
{ "_id" : ObjectId("6284941a29787dffd75a810f"), "name" : "SantaCycle Down" }
Type "it" for more
> []
```

Y si escribimos it nos salen más registros.

```
> db.rick.find({"type":"regular"}, {"name":1})
{ "_id" : ObjectId("6284941a29787dffd75a80f9"), "name" : "Flat Out Awesome" }
{ "_id" : ObjectId("6284941a29787dffd75a80fa"), "name" : "The Wheelford Wheeler" }
{ "_id" : ObjectId("6284941a29787dffd75a80fb"), "name" : "Ricky Wobbles" }
{ "_id" : ObjectId("6284941a29787dffd75a80fc"), "name" : "Ricky's Role Model" }
{ "_id" : ObjectId("6284941a29787dffd75a80fd"), "name" : "Ricky Blows Away the Competition" }
{ "_id" : ObjectId("6284941a29787dffd75a80fe"), "name" : "New Bike On the Block" }
{ "_id" : ObjectId("6284941a29787dffd75a80ff"), "name" : "Starring Ricky" }
{ "_id" : ObjectId("6284941a29787dffd75a8100"), "name" : "The New Rescue Tool" }
{ "_id" : ObjectId("6284941a29787dffd75a8101"), "name" : "Blip Delivers" }
{ "_id" : ObjectId("6284941a29787dffd75a8102"), "name" : "True Loopness" }
{ "_id" : ObjectId("6284941a29787dffd75a8103"), "name" : "Tired and True" }
{ "_id" : ObjectId("6284941a29787dffd75a8104"), "name" : "Scootio Changes Lanes" }
{ "_id" : ObjectId("6284941a29787dffd75a8105"), "name" : "Little Buster Bunker" }
{ "_id" : ObjectId("6284941a29787dffd75a8106"), "name" : "The Most Amazing Thing Put in a Box Ever" }
{ "_id" : ObjectId("6284941a29787dffd75a8107"), "name" : "The Out of Controller" }
{ "_id" : ObjectId("6284941a29787dffd75a8108"), "name" : "Ricky's Rescue Coaching Badge" }
{ "_id" : ObjectId("6284941a29787dffd75a810a"), "name" : "Two Wheel Justice" }
{ "_id" : ObjectId("6284941a29787dffd75a810b"), "name" : "Time Capsule" }
{ "_id" : ObjectId("6284941a29787dffd75a810e"), "name" : "Zoom Encounters" }
{ "_id" : ObjectId("6284941a29787dffd75a810f"), "name" : "SantaCycle Down" }
Type "it" for more
> it
{ "_id" : ObjectId("6284941a29787dffd75a8110"), "name" : "Shining" }
{ "_id" : ObjectId("6284941a29787dffd75a8112"), "name" : "Rock the Float" }
{ "_id" : ObjectId("6284941a29787dffd75a8113"), "name" : "Toot & the Wheelies" }
{ "_id" : ObjectId("6284941a29787dffd75a8114"), "name" : "Trading Places" }
{ "_id" : ObjectId("6284941a29787dffd75a8115"), "name" : "Family Sports Day" }
{ "_id" : ObjectId("6284941a29787dffd75a8116"), "name" : "Saving Mr. Speedy" }
{ "_id" : ObjectId("6284941a29787dffd75a8117"), "name" : "Toot's Invisible Friend" }
{ "_id" : ObjectId("6284941a29787dffd75a8118"), "name" : "Blip in Charge" }
{ "_id" : ObjectId("6284941a29787dffd75a8119"), "name" : "Mrs. Bikely Up All Nightly" }
{ "_id" : ObjectId("6284941a29787dffd75a811b"), "name" : "Ruled by Ricky" }
{ "_id" : ObjectId("6284941a29787dffd75a811c"), "name" : "The Crosswalk Helper" }
{ "_id" : ObjectId("6284941a29787dffd75a811d"), "name" : "Show & Tell Trouble" }
{ "_id" : ObjectId("6284941a29787dffd75a811e"), "name" : "The Zoomtastic Gang" }
{ "_id" : ObjectId("6284941a29787dffd75a811f"), "name" : "False Alarm" }
{ "_id" : ObjectId("6284941a29787dffd75a8120"), "name" : "Steel Awesome Meets Vroomboy" }
{ "_id" : ObjectId("6284941a29787dffd75a8121"), "name" : "Loop Hero of Wheelford" }
{ "_id" : ObjectId("6284941a29787dffd75a8122"), "name" : "Toot De Suite" }
{ "_id" : ObjectId("6284941a29787dffd75a8123"), "name" : "The Gold Ticket Rush" }
{ "_id" : ObjectId("6284941a29787dffd75a8124"), "name" : "The Ramp Camp Bikeout" }
{ "_id" : ObjectId("6284941a29787dffd75a8125"), "name" : "Ricky's Litter Round Up" }
Type "it" for more
> it
{ "_id" : ObjectId("6284941a29787dffd75a8126"), "name" : "Maxwell Gets a Little Help" }
{ "_id" : ObjectId("6284941a29787dffd75a8127"), "name" : "Ricky's in a Twist" }
{ "_id" : ObjectId("6284941a29787dffd75a8128"), "name" : "RepairBops" }
{ "_id" : ObjectId("6284941a29787dffd75a8129"), "name" : "Trike Trials" }
{ "_id" : ObjectId("6284941a29787dffd75a812a"), "name" : "Ramp It Up" }
{ "_id" : ObjectId("6284941a29787dffd75a812b"), "name" : "Slippy Street" }
{ "_id" : ObjectId("6284941a29787dffd75a812c"), "name" : "Bike Buddies Super Speedy Delivery Service" }
{ "_id" : ObjectId("6284941a29787dffd75a812d"), "name" : "DJ's the Boss" }
{ "_id" : ObjectId("6284941a29787dffd75a812e"), "name" : "The Scootbop Bop" }
```

### 11 Eliminar los capítulos que tengan por number 3 y 7.

Sintaxis.

```
db.rick.deleteMany({"number":"3 - 7"})
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.deleteMany({"number":"3 - 7"})
{ "acknowledged" : true, "deletedCount" : 0 }
> □
```

### 1 consulta de agrupación.

### 12 Muestra el mayor number de cada airtime igual a las 17:00.

Sintaxis.

```
db.rick.aggregate([{$group: {"_id":{"airtime":"$17:00"},"number":{"$max":"$number"}}}])
```

Ejecución.

```
> use rick
switched to db rick
> db.rick.aggregate([{$group: {"_id":{"airtime":"$17:00"},"number":{"$max":"$number"}}}])
{ "_id" : { "airtime" : null }, "number" : 52 }
>
> □
```

## **BIBLIOGRAFÍA:**

<https://www.mongodb.com/docs/manual/administration/install-on-linux/>

<https://www.digitalocean.com/community/tutorials/how-to-install-mongodb-on-ubuntu-20-04-es>

<https://www.mongodb.com/docs/manual/reference/sql-comparison/>

<https://www.mongodb.com/docs/manual/>

<https://datos.codeandcoke.com/apuntes:mongodb>

[https://github.com/zpio/NoSql\\_con\\_MongoDB](https://github.com/zpio/NoSql_con_MongoDB)

<https://www.alexmedina.net/hacer-consultas-en-mongodb-pensando-como-en-sql/>