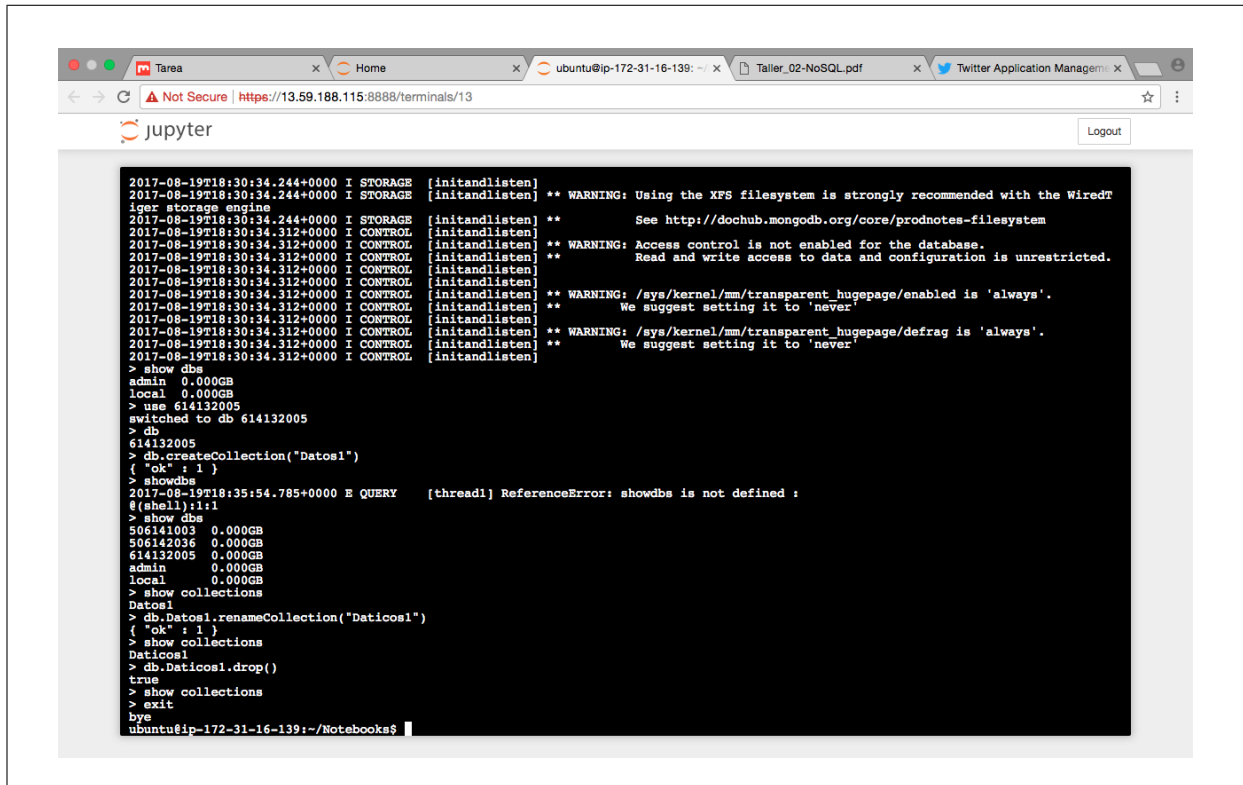


Viviana Márquez

Big Data - Prof. Camargo


Taller 2 - Agosto 26, 2017

1. Pasos 1-8: Abrir MongoDB, crear base de datos y colección, renombrar y eliminar colección.



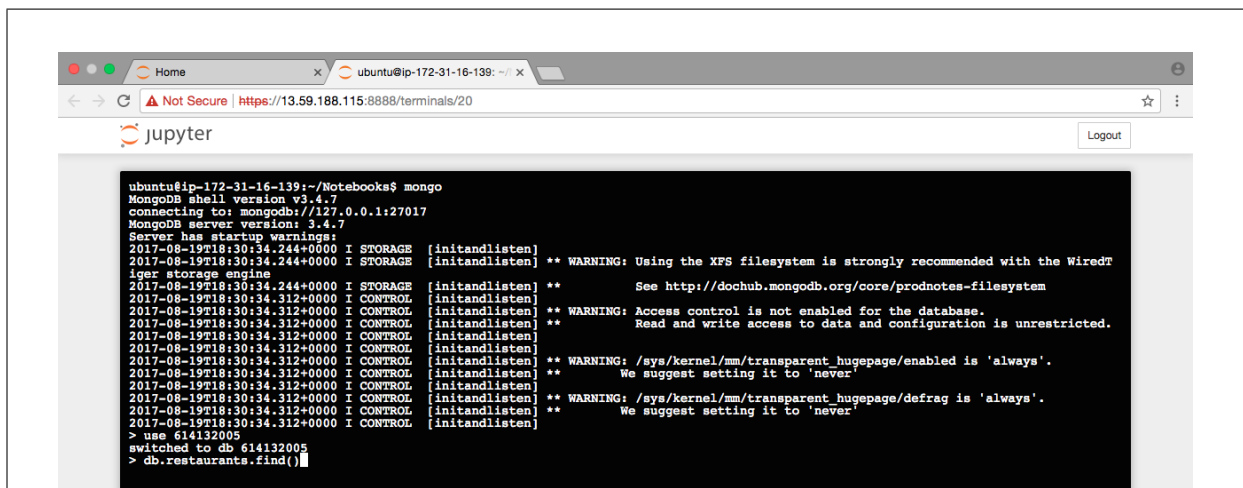
```
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten]
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredT
iger storage engine
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/defrag is 'always'.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
> show dbs
admin 0.000GB
local 0.000GB
> use 614132005
switched to db 614132005
> db
614132005
> db.createCollection("Datos1")
{ "ok" : 1 }
> show dbs
2017-08-19T18:35:54.785+0000 E QUERY [thread1] ReferenceError: showdbs is not defined :
((shell))1:11
> show dbs
506141003 0.000GB
506142036 0.000GB
614132005 0.000GB
admin 0.000GB
local 0.000GB
> show collections
Datos1
> db.Datos1.renameCollection("Daticos1")
{ "ok" : 1 }
> show collections
Daticos1
> db.Daticos1.drop()
true
> show collections
> exit
bye
ubuntu@ip-172-31-16-139:~/Notebooks$
```

2. Paso 9: Importar un dataset



```
ubuntu@ip-172-31-16-139:~/Notebooks/datasets$ mongoimport --db 614132005 --collection restaurants --file /home/ubuntu/Notebooks/data
sets/dataset.json
2017-08-19T18:53:26.143+0000 connected to: localhost
2017-08-19T18:53:27.288+0000 imported 25359 documents
ubuntu@ip-172-31-16-139:~/Notebooks/datasets$
```

3. Paso 10: Visualizar y contar la colección



```
ubuntu@ip-172-31-16-139:~/Notebooks$ mongo
MongoDB shell version v3.4.7
connecting to: mongodb://127.0.0.1:27017
MongoDB server version: 3.4.7
Server has startup warnings:
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten]
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredT
iger storage engine
2017-08-19T18:30:34.244+0000 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled is 'always'.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/defrag is 'always'.
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2017-08-19T18:30:34.312+0000 I CONTROL [initandlisten]
> use 614132005
switched to db 614132005
> db.restaurants.find()
```

```
0:00:00Z", "grade": "B", "score": 21 }, { "date": ISODate("2013-08-28T00:00:00Z"), "grade": "A", "score": 7 }, { "date": ISODate("2013-04-02T00:00:00Z"), "grade": "C", "score": 56 }, { "date": ISODate("2012-08-15T00:00:00Z"), "grade": "B", "score": 27 }, { "date": ISODate("2012-03-28T00:00:00Z"), "grade": "B", "score": 27 } ], "name": "May May Kitchen", "restaurant_id": "40358429" }, { "id": ObjectId("599889262300e7146a5a7046"), "address": { "building": "1", "coord": [ -73.96926909999999, 40.7685235 ], "street": "East 66 Street", "zipcode": "10065" }, "borough": "Manhattan", "cuisine": "American", "grades": [ { "date": ISODate("2014-05-07T00:00:00Z"), "grade": "A", "score": 3 }, { "date": ISODate("2013-05-03T00:00:00Z"), "grade": "A", "score": 4 }, { "date": ISODate("2012-04-30T00:00:00Z"), "grade": "A", "score": 6 }, { "date": ISODate("2011-12-27T00:00:00Z"), "grade": "A", "score": 0 } ], "name": "East 66th Street Kitchen", "restaurant_id": "40359480" }, { "id": ObjectId("599889262300e7146a5a7047"), "address": { "building": "705", "coord": [ -73.9653967, 40.6064339 ], "street": "Kings Highway", "zipcode": "11223" }, "borough": "Brooklyn", "cuisine": "Jewish/Kosher", "grades": [ { "date": ISODate("2014-11-10T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2013-10-10T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-10-04T00:00:00Z"), "grade": "A", "score": 7 }, { "date": ISODate("2012-05-21T00:00:00Z"), "grade": "A", "score": 9 }, { "date": ISODate("2011-12-30T00:00:00Z"), "grade": "B", "score": 19 } ], "name": "Seuda Foods", "restaurant_id": "40360045" }, { "id": ObjectId("599889262300e7146a5a7048"), "address": { "building": "203", "coord": [ -73.97822040000001, 40.6435254 ], "street": "Church Avenue", "zipcode": "11218" }, "borough": "Brooklyn", "cuisine": "Ice Cream, Gelato, Yogurt, Ices", "grades": [ { "date": ISODate("2014-02-10T00:00:00Z"), "grade": "A", "score": 2 }, { "date": ISODate("2013-01-02T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-01-09T00:00:00Z"), "grade": "A", "score": 3 }, { "date": ISODate("2011-11-07T00:00:00Z"), "grade": "A", "score": 12 }, { "date": ISODate("2011-07-21T00:00:00Z"), "grade": "A", "score": 13 } ], "name": "Carvel Ice Cream", "restaurant_id": "40360076" }, { "id": ObjectId("599889262300e7146a5a7049"), "address": { "building": "265-15", "coord": [ -73.7032601, 40.7386417 ], "street": "Hillside Avenue", "zipcode": "11004", "borough": "Queens", "cuisine": "Ice Cream, Gelato, Yogurt, Ices", "grades": [ { "date": ISODate("2014-10-28T00:00:00Z"), "grade": "A", "score": 9 }, { "date": ISODate("2013-09-18T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2012-09-20T00:00:00Z"), "grade": "A", "score": 13 } ], "name": "Carvel Ice Cream", "restaurant_id": "40361322" }, { "id": ObjectId("599889262300e7146a5a704a"), "address": { "building": "6909", "coord": [ -74.0259567, 40.6353674 ], "street": "13 Avenue", "zipcode": "11209", "borough": "Brooklyn", "cuisine": "Deli/Catessen", "grades": [ { "date": ISODate("2014-08-21T00:00:00Z"), "grade": "A", "score": 4 }, { "date": ISODate("2014-03-05T00:00:00Z"), "grade": "A", "score": 3 }, { "date": ISODate("2013-01-10T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2012-09-20T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2011-12-27T00:00:00Z"), "grade": "A", "score": 10 } ], "name": "Nordic Delicacies", "restaurant_id": "40361390" }, { "id": ObjectId("599889262300e7146a5a704b"), "address": { "building": "522", "coord": [ -73.95171, 40.767461 ], "street": "East 74 Street", "zipcode": "10021", "borough": "Manhattan", "cuisine": "American", "grades": [ { "date": ISODate("2014-09-02T00:00:00Z"), "grade": "A", "score": 12 }, { "date": ISODate("2013-12-19T00:00:00Z"), "grade": "A", "score": 16 }, { "date": ISODate("2013-05-28T00:00:00Z"), "grade": "A", "score": 9 }, { "date": ISODate("2012-12-07T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-03-29T00:00:00Z"), "grade": "A", "score": 11 } ], "name": "Glorious Food", "restaurant_id": "40361521" }, { "id": ObjectId("599889262300e7146a5a704c"), "address": { "building": "284", "coord": [ -73.9829239, 40.6580753 ], "street": "Prospect Park West", "zipcode": "11215", "borough": "Brooklyn", "cuisine": "American", "grades": [ { "date": ISODate("2014-11-19T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2013-11-14T00:00:00Z"), "grade": "A", "score": 2 }, { "date": ISODate("2012-12-05T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-05-17T00:00:00Z"), "grade": "A", "score": 11 } ], "name": "The Movable Feast", "restaurant_id": "40361606" } Type 'its' for more > db.restaurants.count() 29359 >
```

4. Paso 11: Buscar en la colección

```
re": 13 } ], "name": "Buddy'S Wonder Bar", "restaurant_id": "40367442" }, { "id": ObjectId("599889262300e7146a5a7100"), "address": { "building": "710", "coord": [ -74.1003379, 40.5655379 ], "street": "New Bomp Lane", "zipcode": "10306", "borough": "Staten Island", "cuisine": "Italian", "grades": [ { "date": ISODate("2014-06-04T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2013-05-15T00:00:00Z"), "grade": "A", "score": 8 }, { "date": ISODate("2012-05-16T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2011-12-28T00:00:00Z"), "grade": "A", "score": 12 }, { "date": ISODate("2011-08-10T00:00:00Z"), "grade": "A", "score": 4 } ], "name": "Ni-Ni'S Cafe", "restaurant_id": "40367570" }, { "id": ObjectId("599889262300e7146a5a7115"), "address": { "building": "1402", "coord": [ -74.1005771, 40.6134163 ], "street": "Clove Road", "zipcode": "10301", "borough": "Staten Island", "cuisine": "Italian", "grades": [ { "date": ISODate("2014-08-20T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2013-07-17T00:00:00Z"), "grade": "A", "score": 3 }, { "date": ISODate("2012-12-01T00:00:00Z"), "grade": "A", "score": 6 }, { "date": ISODate("2011-10-18T00:00:00Z"), "grade": "A", "score": 10 } ], "name": "Roadhouse Restaurant", "restaurant_id": "40368034" }, { "id": ObjectId("599889262300e7146a5a711b"), "address": { "building": "2001", "coord": [ -74.099018, 40.58165000000001 ], "street": "Hyland Boulevard", "zipcode": "10306", "borough": "Staten Island", "cuisine": "American", "grades": [ { "date": ISODate("2014-10-06T00:00:00Z"), "grade": "A", "score": 12 }, { "date": ISODate("2014-03-20T00:00:00Z"), "grade": "A", "score": 8 }, { "date": ISODate("2013-09-26T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2013-04-01T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-03-05T00:00:00Z"), "grade": "A", "score": 9 } ], "name": "Colonnade Diner", "restaurant_id": "40368291" }, { "id": ObjectId("599889262300e7146a5a7138"), "address": { "building": "372", "coord": [ -74.1018239, 40.630788 ], "street": "Forest Avenue", "zipcode": "10301", "borough": "Staten Island", "cuisine": "American", "grades": [ { "date": ISODate("2014-03-08T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2013-09-17T00:00:00Z"), "grade": "A", "score": 2 }, { "date": ISODate("2013-02-14T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2012-07-14T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2011-12-14T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2011-07-11T00:00:00Z"), "grade": "A", "score": 9 } ], "name": "Jody'S Club", "restaurant_id": "40369158" }, { "id": ObjectId("599889262300e7146a5a7169"), "address": { "building": "325", "coord": [ -74.1680654, 40.5595469 ], "street": "Richmond Avenue", "zipcode": "10312", "borough": "Staten Island", "cuisine": "Hamburgers", "grades": [ { "date": ISODate("2014-04-04T00:00:00Z"), "grade": "A", "score": 5 }, { "date": ISODate("2013-03-12T00:00:00Z"), "grade": "A", "score": 6 }, { "date": ISODate("2012-08-08T00:00:00Z"), "grade": "C", "score": 37 }, { "date": ISODate("2012-03-20T00:00:00Z"), "grade": "A", "score": 7 } ], "name": "McDonald'S", "restaurant_id": "40370356" } Type 'its' for more > db.restaurants.find({'address.street': "Broadway", "borough": "Staten Island"}) { "id": ObjectId("599889262300e7146a5a7f31"), "address": { "building": "614", "coord": [ -74.1150201, 40.6252881 ], "street": "Broadway", "zipcode": "10310", "borough": "Staten Island", "cuisine": "American", "grades": [ { "date": ISODate("2014-10-25T00:00:00Z"), "grade": "A", "score": 12 }, { "date": ISODate("2013-09-02T00:00:00Z"), "grade": "A", "score": 10 }, { "date": ISODate("2012-08-20T00:00:00Z"), "grade": "A", "score": 13 }, { "date": ISODate("2012-02-07T00:00:00Z"), "grade": "A", "score": 10 } ], "name": "Staten Island Zoo Cafe", "restaurant_id": "40913269" }, { "id": ObjectId("599889262300e7146a5aa3e4"), "address": { "building": "253", "coord": [ -74.1171975, 40.6352751 ], "street": "Broadway", "zipcode": "10310", "borough": "Staten Island", "cuisine": "Chicken", "grades": [ { "date": ISODate("2014-12-17T00:00:00Z"), "grade": "A", "score": 25 }, { "date": ISODate("2014-03-19T00:00:00Z"), "grade": "B", "score": 20 }, { "date": ISODate("2013-05-23T00:00:00Z"), "grade": "B", "score": 14 }, { "date": ISODate("2012-03-07T00:00:00Z"), "grade": "A", "score": 10 } ], "name": "Aaa Kennedy Fried Chicken", "restaurant_id": "41570059" }, { "id": ObjectId("599889272300e7146a5ad0de"), "address": { "building": "490", "coord": [ -74.116484, 40.6290819 ], "street": "Broadway", "zipcode": "10310", "borough": "Staten Island", "cuisine": "Mexican", "grades": [ { "date": ISODate("2015-01-20T00:00:00Z"), "grade": "Not Yet Graded", "score": 21 } ], "name": "Dona Chonita Inc.", "restaurant_id": "50017525" } >
```

5. Paso 12: Remover elemento de la búsqueda en colección

```
> db.restaurants.remove({"address.street": "Broadway", "borough": "Staten Island"}, 1)
WriteResult({"nRemoved": 1 })
> db.restaurants.remove({"restaurant_id": 40913269})
WriteResult({"nRemoved": 0 })
> db.restaurants.find({"address.street": "Broadway", "borough": "Staten Island"})
{ "_id" : ObjectId("599889262300e7146a5aa3e4"), "address" : { "building" : "253", "coord" : [ -74.1171975, 40.6352751 ], "street" : "Broadway", "zipcode" : "10310" }, "borough" : "Staten Island", "cuisine" : "Chicken", "grades" : [ { "date" : ISODate("2014-12-17T00:00:00Z"), "grade" : "B", "score" : 25 }, { "date" : ISODate("2014-03-19T00:00:00Z"), "grade" : "B", "score" : 20 }, { "date" : ISODate("2013-09-23T00:00:00Z"), "grade" : "B", "score" : 14 }, { "date" : ISODate("2012-03-07T00:00:00Z"), "grade" : "A", "score" : 10 } ], "name" : "Aaa Kennedy Fried Chicken", "restaurant_id" : "41570059" }
{ "_id" : ObjectId("599889272300e7146a5ad0de"), "address" : { "building" : "490", "coord" : [ -74.116484, 40.6290819 ], "street" : "Broadway", "zipcode" : "10310" }, "borough" : "Staten Island", "cuisine" : "Mexican", "grades" : [ { "date" : ISODate("2015-01-20T00:00:00Z"), "grade" : "Not Yet Graded", "score" : 21 } ], "name" : "Dona Chonita Inc.", "restaurant_id" : "50017525" }
>
```

6. Paso 13: Actualizar un campo

```
> db.restaurants.update({"address.street": "Wall Street", "borough": "Manhattan", "cuisine": "Italian"}, {$set: {"cuisine": "American"}}
WriteResult({"nMatched": 1, "nUpserted": 0, "nModified": 1 })
> db.restaurants.find({"restaurant_id": "41287433"})
{ "_id" : ObjectId("599889262300e7146a5a8e63"), "address" : { "building" : "55", "coord" : [ -74.0092784, 40.7060535 ], "street" : "Wall Street", "zipcode" : "10005" }, "borough" : "Manhattan", "cuisine" : "American", "grades" : [ { "date" : ISODate("2014-01-24T00:00:00Z"), "grade" : "A", "score" : 3 }, { "date" : ISODate("2013-01-25T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2012-08-21T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2012-03-26T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2011-04-04T00:00:00Z"), "grade" : "A", "score" : 2 } ], "name" : "Cipriani Club 55", "restaurant_id" : "41287433" }
>
```

7. Pasos 14-15: Eliminar colección y base de datos

```
> db.restaurants.remove({})
WriteResult({"nRemoved": 25358 })
> show collections
restaurants
> db.dropDatabase()
{ "dropped": "614132005", "ok": 1 }
> show dbs
admin 0.000GB
local 0.000GB
> exit
bye
ubuntu@ip-172-31-16-139:~/Notebooks$
```