

Ejercicios sesión 5

1. Obtén los datos de contacto de cada compañía.

sample_training.companies DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER **OPTIONS**

PROJECT `{(name:1, homepage_url:1, twitter_username:1, email_address:1, phone_number:1, _id:0)}`

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

VIEW `{}` `[]` `[]` `[]` Displaying documents 1 - 20 of 95

```
name: "Wetpaint"
homepage_url: "http://wetpaint-inc.com"
twitter_username: "BachelorWetpaint"
email_address: "info@wetpaint.com"
phone_number: "206.859.6300"
```

2. Obtén el identificador de la clase de cada calificación.

sample_training.grades DOCUMENTS 100.0k TOTAL SIZE 22.2MB AVG. SIZE 233B INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER **OPTIONS**

PROJECT `{(class_id:1)}`

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

VIEW `{}` `[]` `[]` `[]` Displaying documents 1 - 20 of 100000

```
_id: ObjectId("56d5f7eb604eb380b0d8d8ce")
class_id: 339
```

3. Obtén el nombre de todas las compañías fundadas en octubre.

sample_training.companies DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER `{founded_month: {$eq: 10}}` **OPTIONS**

PROJECT `{(name: 1, founded_month: 1)}`

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

VIEW `{}` `[]` `[]` `[]` Displaying documents 1 - 20 of 301

```
_id: ObjectId("52cdef7c4bab8bd675297d8a")
name: "Wetpaint"
founded_month: 10
```

4. Obtén el nombre de todas las compañías fundadas en 2008.

sample_training.companies

DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES 1

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER `{founded_year: {$eq: 2008}}` **OPTIONS**

PROJECT `{name: 1, founded_year: 1}`

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

VIEW `{}` `{} {}` Displaying documents 1 - 20 of 1224

```
_id: ObjectId("52cdef7c4bab8bd675297da8")
name: "OpenX"
founded_year: 2008
```

5. Obtén todos los *post* del autor machine.

sample_training.posts

DOCUMENTS 500 TOTAL SIZE 16.6MB AVG. SIZE 34.1KB INDEXES 1

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER `{author: {$eq: "machine"}}` **OPTIONS**

PROJECT

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

ADD DATA `{}` `{}` `{}` Displaying documents 1 - 20 of 50

```
_id: ObjectId("50ab0f8bbc1bfe2536dc3f9")
body: "Amendment I
<p>Congress shall make no law respecting an establishment ..."
permalink: "aRjNnLZkJKtyspAIoRGe"
author: "machine"
title: "Bill of Rights"
tags: Array
comments: Array
date: 2012-11-20T05:05:15.231+00:00
```

6. Obtén todas las calificaciones provenientes de los grupos 357, 57 y 465.

sample_training.grades

DOCUMENTS 100.0k TOTAL SIZE 22.2MB AVG. SIZE 233B INDEXES 1 90

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER `{{class_id: {$in: [357,57,465]}}}` **OPTIONS** **FIND**

PROJECT

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

ADD DATA **VIEW** **LIST** **JSON** **GRID** Displaying documents 1 - 20 of 584

```
_id: ObjectId("56d5f7eb604eb380b0d8d8d4")
student_id: 0
> scores: Array
class_id: 57
```

7. Obtén todas las compañías fundadas en octubre del 2008.

sample_training.companies

DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES 1

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER `{{ $and: [{founded_month: 10}, {founded_year: 2008}] }}` **OPTIONS** **FIND**

PROJECT

SORT **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 0

ADD DATA **VIEW** **LIST** **JSON** **GRID** Displaying documents 1 - 20 of 63

```
_id: ObjectId("52cdef7c4bab8bd6752985ca")
name: "tunesBag"
permalink: "tunesbag"
crunchbase_url: "http://www.crunchbase.com/company/tunesbag"
homepage_url: "http://www.tunesBag.com"
blog_url: "http://tunesBag.blogspot.com/"
blog_feed_url: "http://blog.tunesbag.com/feeds/posts/default?alt=rss"
twitter_username: ""
category_code: "games_video"
number_of_employees: null
founded_year: 2008
founded_month: 10
```

8. Obtén todas las compañías con más de 50 empleados.

sample_training.companies

DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES 1 TO 11

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER {number_of_employees:{\$gt:50}} **OPTIONS** **FIND**

PROJECT {name:1}

SORT

COLLATION

MAXTIMEMS 5000

SKIP 0 **LIMIT** 0

VIEW [] [] [] []

Displaying documents 1 - 20 of 793

```
{
  "_id": ObjectId("52cdef7c4bab8bd675297d8e"),
  "name": "Facebook"
}
```

```
{
  "_id": ObjectId("52cdef7c4bab8bd675297d94"),
  "name": "Twitter"
}
```

9. Obtén las rutas con un número de paradas entre 1 y 5.

sample_training.routes

DOCUMENTS 67.0k TOTAL SIZE 11.8MB AVG. SIZE 184B INDEXES 1 TO 6

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER {stops:{\$in:[1,2,3,4,5]}} **OPTIONS** **FIND**

ADD DATA **VIEW** [] [] [] []

Displaying documents 1 - 11 of 11

```
{
  "_id": ObjectId("56e9b39b732b6122f8780243"),
  "airline": {
    "src_airport": "YRT",
    "dst_airport": "YEK",
    "codeshare": "",
    "stops": 1,
    "airplane": "ATR"
  }
}
```

10. Obtén la empresa con el menor número de empleados.

sample_training.companies

DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES 1 TO 11

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER {number_of_employees: {\$ne: null}} **OPTIONS** **FIND**

PROJECT {name: 1, number_of_employees: 1}

SORT {number_of_employees: 1} **MAXTIMEMS** 5000

COLLATION

SKIP 0 **LIMIT** 0

VIEW [] [] [] []

Displaying documents 1 - 20 of 4448

```
{
  "_id": ObjectId("52cdef7c4bab8bd675297dbd"),
  "name": "YouTube",
  "number_of_employees": 0
}
```

```
{
  "_id": ObjectId("52cdef7c4bab8bd675297ddd"),
  "name": "Mashery",
  "number_of_employees": 0
}
```

11. Obtén la empresa con el mayor número de empleados.

The screenshot shows the MongoDB Compass interface for the `sample_training.companies` collection. The query is configured with a `PROJECT` stage to select the company name and employee count, and a `SORT` stage to sort by `number_of_employees` in descending order. The results show the first document, which is for IBM with 388,000 employees.

sample_training.companies

DOCUMENTS 9.5k TOTAL SIZE 34.8MB AVG. SIZE 3.7KB INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER **OPTIONS**

PROJECT `{name: 1, number_of_employees: 1}`

SORT `{number_of_employees: -1}` **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 1

VIEW `{}`

Displaying documents 1 - 1 of

```
{
  "_id": ObjectId("52cdef7c4bab8bd67529856a"),
  "name": "IBM",
  "number_of_employees": 388000
}
```

12. Obtén el viaje con mayor duración.

The screenshot shows the MongoDB Compass interface for the `sample_training.trips` collection. The query is configured with a `PROJECT` stage to select the start and end station names and trip duration, and a `SORT` stage to sort by `tripduration` in descending order. The results show the first document, which is for a trip from Clark St & Henry St to State St & Smith St with a duration of 326,222 milliseconds.

sample_training.trips

DOCUMENTS 10.0k TOTAL SIZE 4.2MB AVG. SIZE 440B INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER **OPTIONS**

PROJECT `{"start station name":1, "end station name":1, tripduration:1}`

SORT `{tripduration: -1}` **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 1

VIEW `{}`

Displaying documents 1 - 1 of

```
{
  "_id": ObjectId("572bb822b288919b68ac07c"),
  "tripduration": 326222,
  "start station name": "Clark St & Henry St",
  "end station name": "State St & Smith St"
}
```

13. Obtén el viaje con menor duración.

The screenshot shows the MongoDB Compass interface for the `sample_training.trips` collection. The query is configured with a `PROJECT` stage to select the start and end station names and trip duration, and a `SORT` stage to sort by `tripduration` in ascending order. The results show the first document, which is for a trip from E 85 St & York Ave to E 85 St & York Ave with a duration of 61 milliseconds.

sample_training.trips

DOCUMENTS 10.0k TOTAL SIZE 4.2MB AVG. SIZE 440B INDEXES 1

Documents Aggregations Schema Explain Plan Indexes Validation

FILTER **OPTIONS**

PROJECT `{"start station name":1, "end station name":1, tripduration:1}`

SORT `{tripduration:1}` **MAXTIMES** 5000

COLLATION **SKIP** 0 **LIMIT** 1

VIEW `{}`

Displaying documents 1 - 1 of 1

```
{
  "_id": ObjectId("572bb822b288919b68ac2d4"),
  "tripduration": 61,
  "start station name": "E 85 St & York Ave",
  "end station name": "E 85 St & York Ave"
}
```