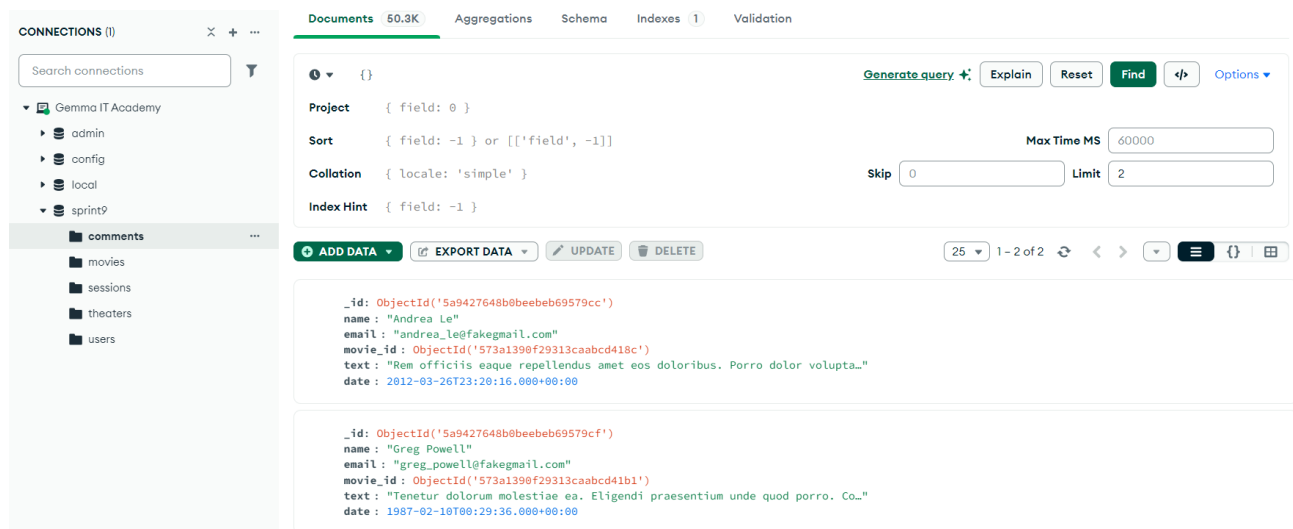


Nivell 1

Exercici 1

- Mostra els 2 primers comentaris que hi ha en la base de dades.



The screenshot shows the MongoDB Compass interface. On the left, the 'CONNECTIONS' panel lists a connection named 'Gemma IT Academy' with a tree view showing databases like 'admin', 'config', 'local', 'sprint9', and collections like 'comments', 'movies', 'sessions', 'theaters', and 'users'. The 'comments' collection is selected. The main panel shows a query editor with the following query:

```
{}
```

The query is executed, and the results are displayed in a table. The first two documents are shown:

```
{
  "_id": ObjectId("5a9427648b0beebe69579cc"),
  "name": "Andrea Le",
  "email": "andrea_le@fakegmail.com",
  "movie_id": ObjectId("573a1390f29313caabcd418c"),
  "text": "Rem officiiis eaque repellendus amet eos doloribus. Porro dolor volupta...",
  "date": 2012-03-26T23:20:16.000+00:00
}
```

```
{
  "_id": ObjectId("5a9427648b0beebe69579cf"),
  "name": "Greg Powell",
  "email": "greg_powell@fakegmail.com",
  "movie_id": ObjectId("573a1390f29313caabcd41b1"),
  "text": "Tenetur dolorum molestiae ea. Eligendi praesentium unde quod porro. Co...",
  "date": 1987-02-10T00:29:36.000+00:00
}
```

- Quants usuaris tenim registrats?

```
>_MONGOSH
> use sprint9
< switched to db sprint9
> db.users.countDocuments()
< 185
```

- Quants cinemes hi ha en l'estat de Califòrnia?

```
> db.theaters.find({"location.address.state": "CA"}).count()
< 169
```

- Quin va ser el primer usuari/ària en registrar-se?

```
> db.users.find().sort({created_at: 1}).limit(1)
< {
  "_id": ObjectId('59b99db4cfa9a34dcd7885b6'),
  "name": 'Ned Stark',
  "email": 'sean_bean@gameofthron.es',
  "password": '$2b$12$UREFwsRUoyF0CRqGNK0Lz00HM/jLhgUCNNIj9RJAqMUQ74cr1J1Vu'
}
```

- Quantes pel·lícules de comèdia hi ha en la nostra base de dades?

```
> db.movies.countDocuments({genres: "Comedy"})  
< 7024
```

Exercici 2

Mostra'm tots els documents de les pel·lícules produïdes en 1932, però que el gènere sigui drama o estigui en francès.

```
>_MONGOSH  
  
> db.movies.find({year: 1932, $or: [{genres: "Drama"}, {languages: "French"}]})  
< {  
  _id: ObjectId('573a1391f29313caabcd9458'),  
  plot: 'A young artist draws a face at a canvas on his easel. Suddenly the mouth on the drawing comes into life and starts talking. The artist tries to wi  
  runtime: 55,  
  rated: 'UNRATED',  
  cast: [  
    'Enrique Rivero',  
    'Elizabeth Lee Miller',  
    'Pauline Carton',  
    'Odette Talazac'  
  ],  
  num_mflix_comments: 1,  
  poster: 'https://m.media-amazon.com/images/M/MV5BYWY3ODE5ZWEtYjlmYi00NjA4LTk4ZWYtMzBhZDE5MjY0YTUxXkEyXkFqcGdeQXVyNzI4MDMyMTU@._V1_SY1000_SX677_AL_.jpg',  
  title: 'The Blood of a Poet',  
  lastupdated: '2015-09-16 13:13:05.537000000',  
  languages: [  
    'French'  
  ],  
  released: 2010-05-20T00:00:00.000Z,  
  directors: [  
    'Jean Cocteau'  
  ],  
  writers: [  
    'Jean Cocteau'  
  ],  
  awards: {  
    wins: 1,  
    nominations: 0,  
    text: '1 win.'  
  },  
  year: 1932,  
  imdb: {  
    rating: 7.5,  
    votes: 3903,  
    id: 21331  
  },  
  countries: [  
    'France'  
  ],  
  type: 'movie',  
  tomatoes: {  
    viewer: {  
      rating: 3.9,  
      numReviews: 2865,  
      meter: 86  
    },  
    dvd: 2008-04-29T00:00:00.000Z,  
    critic: {  
      rating: 7.7,  
      numReviews: 18,  
      meter: 94  
    },  
    lastUpdated: 2015-08-19T19:22:08.000Z,  
    rotten: 1,  
    production: 'Home Vision Entertainment',  
    fresh: 17  
  }  
}
```

```

{
  _id: ObjectId('573a1392f29313caabcd99a3'),
  plot: 'Junta is hated by the people in the village where she lives, especially by the women, who suspect her of being a witch. Only she can climb the nea',
  genres: [
    'Drama',
    'Fantasy',
    'Mystery'
  ],
  runtime: 85,
  cast: [
    'Leni Riefenstahl',
    'Mathias Wieman',
    'Beni Fährer',
    'Max Holzboer'
  ],
  poster: 'https://m.media-amazon.com/images/M/MV5BNTQ1NTMzMtQ0DIyYS00MTAxLWE1NTgtZGFkZTE2YmZkZmNjXkEyXkFqcGdeQXVyNTA2NDc4OAA@._V1_SY1000_SX677_AL_.jpg',
  title: 'The Blue Light',
  fullplot: 'Junta is hated by the people in the village where she lives, especially by the women, who suspect her of being a witch. Only she can climb the',
  languages: [
    'German',
    'Italian'
  ],
  released: 1934-05-08T00:00:00.000Z,
  directors: [
    'Leni Riefenstahl',
    'Bèla Balázs'
  ],
  writers: [
    'Bèla Balázs',
    'Leni Riefenstahl (story)'
  ],
  awards: {
    wins: 1,
    nominations: 1,
    text: '1 win & 1 nomination.'
  },
  lastupdated: '2015-08-03 01:02:12.350000000',
  year: 1932,
  imdb: {
    rating: 7,
    votes: 727,
    id: 22694
  },
  countries: [
    'Germany'
  ],
  type: 'movie',
  tomatoes: {
    viewer: {
      rating: 3.7,
      numReviews: 325,
      meter: 61
    },
    dvd: 2006-08-22T00:00:00.000Z,
    critic: 5
  },
  lastUpdated: 2015-08-14T18:39:12.000Z,
  rotten: 2,
  fresh: 6
}
}
{
  _id: ObjectId('573a1392f29313caabcd99e3'),
  plot: 'A young French soldier in World War I is overcome with guilt when he kills a German soldier who, like himself, is a musically gifted conscript, ea',
  genres: [
    'Drama'
  ],
  runtime: 76,
  cast: [
    'Lionel Barrymore',
    'Nancy Carroll',
    'Phillips Holmes',
    'Louise Carter'
  ],
  num_mflix_comments: 2,
  poster: 'https://m.media-amazon.com/images/M/MV5BYzJlMDZjM2QtNWU4Ny00ZGRiLTljNjctZGZjNGM2ZmIzN2I1XkEyXkFqcGdeQXVyMjUxODE0MDY@._V1_SY1000_SX677_AL_.jpg',
  title: 'Broken Lullaby',
  fullplot: 'A young French soldier in World War I is overcome with guilt when he kills a German soldier who, like himself, is a musically gifted conscript',
  languages: [
    'English'
  ],
  released: 1932-01-24T00:00:00.000Z,
  directors: [
    'Ernst Lubitsch'
  ]
}

```

[...]

També es pot fer sense el shell:

Gemma IT Academy > sprint9 > movies

Documents 23.5K Aggregations Schema Indexes 1 Validation

Query: {year: 1932, \$or: [{genres: "Drama"}, {languages: "French"}]}

Project: { field: 0 }

Sort: { field: -1 } or [['field', -1]]

Collation: { locale: 'simple' }

Index Hint: { field: -1 }

Max Time MS: 60000

Skip: 0 **Limit:** 0

Buttons: Generate query, Explain, Reset, Find

Actions: ADD DATA, EXPORT DATA, UPDATE, DELETE, INSIGHT

Results: 25 1 - 18 of 18

```
{
  "_id": "ObjectId('573a1391f29313caabcd9458')",
  "plot": "A young artist draws a face at a canvas on his easel. Suddenly the mou...",
  "runtime": 55,
  "rated": "UNRATED",
  "cast": Array(4),
  "num_mflix_comments": 1,
  "poster": "https://m.media-amazon.com/images/M/MV5BYWY30DE5ZWetYjlmYi00NjA4LTk4ZW...",
  "title": "The Blood of a Poet",
  "lastupdated": "2015-09-16 13:13:05.537000000",
  "languages": Array(1),
  "released": "2010-05-20T00:00:00.000+00:00",
  "directors": Array(1),
  "writers": Array(1),
  "awards": Object,
  "year": 1932,
  "imdb": Object,
  "countries": Array(1),
  "type": "movie",
  "tomatoes": Object
}
```

Exercici 3

Mostra'm tots els documents de pel·lícules estatunidenques que tinguin entre 5 i 9 premis que van ser produïdes entre 2012 i 2014.

Si es fa amb el Shell: `db.movies.find({countries: "USA", "awards.wins": {$gte: 5, $lte: 9}, year: {$gte: 2012, $lte: 2014}})`

Sino:

🕒 {countries: "USA", "awards.wins": {\$gte: 5, \$lte: 9}, year: {\$gte: 2012, \$lte: 2014}} [Generate query](#) ⚡ Explain Reset Find </> Options

Project { field: 0 }

Sort { field: -1 } or [['field', -1]]

Max Time MS 60000

Collation { locale: 'simple' }

Skip 0

Limit 0

Index Hint { field: -1 }

+ ADD DATA

EXPORT DATA

UPDATE

DELETE

INSIGHT

25

1 - 25 of 166

↺

↻

↷

⌵

☰

🔗

```
_id: ObjectId('573a13acf29313caabd29366')
fullplot: "The manager of the negative assets sector of Life magazine, Walter Mit..."
imdb: Object
  year: 2013
  plot: "When his job along with that of his co-worker are threatened, Walter t..."
  genres: Array (3)
  rated: "PG"
  metacritic: 54
  title: "The Secret Life of Walter Mitty"
  lastupdated: "2015-08-31 00:10:51.747000000"
  languages: Array (3)
  writers: Array (3)
  type: "movie"
  tomatoes: Object
    poster: "https://m.media-amazon.com/images/M/MV5BODYwNDYxNDk1Nl5BMl5BanBnXkFtZT..."
    num_mflix_comments: 1
    released: 2013-12-25T00:00:00.000+00:00
  awards: Object
  countries: Array (2)
  cast: Array (4)
  directors: Array (1)
  runtime: 114
```

Nivell 2

Exercici 1

Compta quants comentaris escriu un/a usuari/ària que utilitza “GAMEOFTHRON.ES” com a domini de correu electrònic.

```
> db.comments.countDocuments({email: {$regex: /@gameofthron.es$/i}})
< 22841
```

🕒 {email: {\$regex: /@gameofthron.es\$/i}}

[Generate query](#) ⚡

Explain

Project { field: 0 }

Sort { field: -1 } or [['field', -1]]

Max

Collation { locale: 'simple' }

Skip 0

Index Hint { field: -1 }

+ ADD DATA

EXPORT DATA

UPDATE

DELETE

INSIGHT

25

1 - 25 of 22841

Exercici 2

Quants cinemes hi ha en cada codi postal situats dins de l'estat Washington D. C. (DC)?

```
> db.theaters.aggregate([
  {$match: {"location.address.state": "DC"}},
  {$group: {_id: "$location.address.zipcode", total_cinemes: {$sum: 1}}}
])
< {
  _id: '20002',
  total_cinemes: 1
}
{
  _id: '20010',
  total_cinemes: 1
}
{
  _id: '20016',
  total_cinemes: 1
}
```

Nivell 3

Exercici 1

Troba totes les pel·lícules dirigides per John Landis amb una puntuació IMDb (Internet Movie Database) d'entre 7,5 i 8.

```
>_MONGOSH
mongosh: Gemma IT Academy

> db.movies.find({directors: "John Landis", "imdb.rating": {$gte: 7.5, $lte: 8}})
< [
  {
    _id: ObjectId('573a1397f29313caabce6d94'),
    fullplot: "Faber College has one frat house so disreputable it will take anyone. It has a second one full of white, anglo-saxon, rich young men who are s
    imdb: {
      rating: 7.6,
      votes: 84834,
      id: 77975
    },
    year: 1978,
    plot: 'At a 1962 college, Dean Vernon Wormer is determined to expel the entire Delta Tau Chi Fraternity, but those trouble-makers have other plans for hi
    genres: [
      'Comedy'
    ],
    rated: 'R',
    metacritic: 82,
    title: 'Animal House',
    lastupdated: '2015-09-13 00:02:47.803000000',
    languages: [
      'English',
      'Italian'
    ],
    writers: [
      'Harold Ramis',
      'Douglas Kenney',
      'Chris Miller'
    ],
    type: 'movie',
    tomatoes: {
```

[...]

Gemma IT Academy > sprint9 > movies Open Mongo

Documents 23.5K Aggregations Schema Indexes 1 Validation

▼ {directors: "John Landis", "imdb.rating": {\$gte: 7.5, \$lte: 8}}

Generate query ⚡ Explain Reset Find </> C

Project { field: 0 }

Sort { field: -1 } or [['field', -1]] Max Time MS 60000

Collation { locale: 'simple' } Skip 0 Limit 0

Index Hint { field: -1 }

ADD DATA EXPORT DATA UPDATE DELETE INSIGHT

25 1 - 4 of 4

```
_id: ObjectId('573a1397f29313caabce6d94')
fullplot: "Faber College has one frat house so disreputable it will take anyone. ..."
imdb: Object
  year: 1978
  plot: "At a 1962 college, Dean Vernon Wormer is determined to expel the entir..."
genres: Array (1)
rated: "R"
metacritic: 82
title: "Animal House"
lastupdated: "2015-09-13 00:02:47.803000000"
languages: Array (2)
writers: Array (3)
type: "movie"
tomatoes: Object
  poster: "https://m.media-amazon.com/images/M/MV5BM2M2ZDA4MTYtOGRjMi00OTg5LWI1ZT..."
  num_mflix_comments: 1
  released: 1978-07-28T00:00:00.000+00:00
awards: Object
countries: Array (1)
cast: Array (4)
directors: Array (1)
runtime: 109
```

[...]

Exercici 2

Mostra en un mapa la ubicació de tots els teatres de la base de dades.

Gemma IT Academy > sprint9 > theaters

Documents 1.6K Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#) [Reset](#) [Analyze](#) [Options](#)

[EXPORT SCHEMA](#) This report is based on a sample of 1000 documents. [Learn more](#)

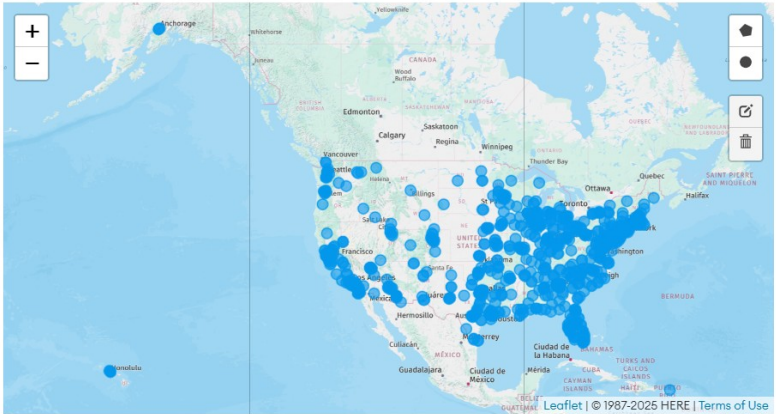
▸ address

document

Document with 5 nested fields.

▸ geo

coordinates

A map of North America, including parts of Canada, the United States, and Mexico, showing the locations of theaters. The map is populated with numerous blue dots, representing the geographic coordinates of the theaters. The dots are densely clustered in the eastern United States and the Great Lakes region, with more scattered dots across the western United States and Canada. Major cities like New York, Chicago, Los Angeles, and Mexico City are visible. The map includes a search bar, zoom controls, and a legend.