Nivell 1

```
>_MONGOSH                                                              ⓘ
> db["comments"].find()
<
> use Sprint9
< switched to db Sprint9
```

Exercici 1

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

```
> db["comments"].find().limit(2)
```

```
> db["comments"].find().limit(2)
< {
    _id: ObjectId('5a9427648b0beebeb69579cc'),
    name: 'Andrea Le',
    email: 'andrea_le@fakegmail.com',
    movie_id: ObjectId('573a1390f29313caabcd418c'),
    text: 'Rem officiis eaque repellendus amet eos doloribus. Porro dolor voluptatum voluptates neque culpa molestias. Vo
    date: 2012-03-26T23:20:16.000Z
  }
  {
    _id: ObjectId('5a9427648b0beebeb69579cf'),
    name: 'Greg Powell',
    email: 'greg_powell@fakegmail.com',
    movie_id: ObjectId('573a1390f29313caabcd41b1'),
    text: 'Tenetur dolorum molestiae ea. Eligendi praesentium unde quod porro. Commodi nisi sit placeat rerum vero cupid
    date: 1987-02-10T00:29:36.000Z
  }
```

- Quants usuaris tenim registrats?

```
> db["users"].countDocuments()
< 185
```

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

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

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

```
> db.users.find().sort({_id:1}).limit(1)
< {
    _id: ObjectId('59b99db4cfa9a34dcd7885b6'),
    name: 'Ned Stark',
    email: 'sean_bean@gameofthron.es',
    password: '$2b$12$UREFwsRUoyF0CRqGNK0LzO0HM/jLhgUCNNIJ9RJAqMUQ74crlJ1Vu'
  }
```

- 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 l'any 1932, però que el gènere sigui drama o estiguin en francès.

Query: db.movies.find({year:1932,
$or: [{genres: "Drama"},{countries: "France"}]
}).forEach(printjson)

```
> db.movies.find({year:1932, $or:[{genres:"Drama"},{countries:"France"}]}).forEach(printjson)
```

```
> db.movies.find({year:1932, $or:[{genres:"Drama"},{countries:"France"}]}).forEach(printjson)
< {
    _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.
    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/MV5BYWY3ODE5ZWEtYjlmYi00NjA4LTk4ZWYtMzBhZDE5MjY0YTYxXkEyXkFqcGdeQXVyNzI4MDMyMTU@._V1_
    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,
```

(...)

Exercici 3

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

Query: db.movies.find({countries: "USA",
"awards.wins": {$gte:5, $lte:9},
year: {$gte:2012, $lte:2014}
}).forEach(printjson)

```
> db.movies.find({countries:"USA", "awards.wins":{$gte:5, $lte:9}, year:{$gte:2012, $lte:2014}}).forEach(printjson)
```

```
> db.movies.find({countries:"USA", "awards.wins":{$gte:5, $lte:9}, year:{$gte:2012, $lte:2014}}).forEach(printjson)
< {
    _id: ObjectId('573a13acf29313caabd29366'),
    fullplot: "The manager of the negative assets sector of Life magazine, Walter Mitty, has been working for sixteen years for the ma
    imdb: { rating: 7.4, votes: 211230, id: 359950 },
    year: 2013,
    plot: 'When his job along with that of his co-worker are threatened, Walter takes action in the real world embarking on a global j
    genres: [ 'Adventure', 'Comedy', 'Drama' ],
    rated: 'PG',
    metacritic: 54,
    title: 'The Secret Life of Walter Mitty',
    lastupdated: '2015-08-31 00:10:51.747000000',
    languages: [ 'English', 'Spanish', 'Icelandic' ],
    writers: [
      'Steve Conrad (screenplay)',
      'Steve Conrad (screen story by)',
      'James Thurber (based on the short story by)'
    ],
    type: 'movie',
    tomatoes: {
      website: 'http://WalterMitty.com',
      viewer: { rating: 3.7, numReviews: 77663, meter: 70 },
      dvd: 2014-04-15T00:00:00.000Z,
```

(...)

Nivell 2

Exercici 1

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

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

Exercici 2

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

Query:
```
db.theaters.aggregate([
  { $match: { "location.address.state": "DC" } },
  { $group: {
    _id: "$location.address.zipcode",
    total_cinemes: { $sum: 1 }
  }}
])
```

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

```
> db.movies.find({directors:"John Landis", "imdb.rating":{$gte:7.5, $lte:8}}).forEach(printjson)
```

```
> db.movies.find({directors:"John Landis", "imdb.rating":{$gte:7.5, $lte:8}}).forEach(printjson)
< {
    _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, r
    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
    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: {
      website: 'http://www.animalhouse.com/',
      viewer: { rating: 3.8, numReviews: 184490, meter: 89 },
      dvd: 1998-02-24T00:00:00.000Z,
      critic: { rating: 7.7, numReviews: 46, meter: 91 },
      lastUpdated: 2015-09-13T17:40:34.000Z,
      consensus: "The talents of director John Landis and Saturday Night Live's irrepressible John Belushi conspired to create a rambu
      rotten: 4,
```

(...)