

EXERCISE 18

MONGODB

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Structure of 'restaurants' collection:

```
{  
  "address": {  
    "building": "1007",  
    "coord": [ -73.856077, 40.848447 ],  
    "street": "Morris Park Ave",  
    "zipcode": "10462"  
  },  
  "borough": "Bronx",  
  "cuisine": "Bakery",  
  "grades": [  
    { "date": { "$date": 1393804800000 }, "grade": "A", "score": 2 },  
    { "date": { "$date": 1378857600000 }, "grade": "A", "score": 6 },  
    { "date": { "$date": 1358985600000 }, "grade": "A", "score": 10 },  
    { "date": { "$date": 1322006400000 }, "grade": "A", "score": 9 },  
    { "date": { "$date": 1299715200000 }, "grade": "B", "score": 14 }  
  ],  
  "name": "Morris Park Bake Shop",  
  "restaurant_id": "30075445"  
}
```

1. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which prepared dish except 'American' and 'Chinees' or restaurant's name begins with letter 'Wil'.

The screenshot shows a MongoDB query builder interface with the following details:

Filter (dropdown): \$or: [{ cuisine: { \$nin: ["American", "Chinese"] } }, { name: { \$regex: /^Wil/i } }]

Reset **Apply** **Options**

Result 1:

```
_id: ObjectId('69087fed4c3bc21c7ceffbd1')
address: object
borough: "Bronx"
cuisine: "Bakery"
grades: Array (2)
name: "Morris Park Bake Shop"
restaurant_id: "30075445"
```

Result 2:

```
_id: ObjectId('69087fed4c3bc21c7ceffbd2')
address: object
borough: "Brooklyn"
cuisine: "American"
grades: Array (2)
name: "Wil's BBQ"
restaurant_id: "30112345"
```

2. Write a MongoDB query to find the restaurant Id, name, and grades for those restaurants which achieved a grade of "A" and scored 11 on an ISODate "2014-08-11T00:00:00Z" among many of survey dates..

```
Filter {  
    grades: {  
        $elemMatch: {  
            grade: "A",  
            score: 11,  
            date: { $date: "2014-08-11T00:00:00Z" }  
        }  
    }  
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffbd2')  
address: Object  
borough: "Brooklyn"  
cuisine: "American"  
grades: Array (2)  
name: "Wil's BBQ"  
restaurant_id: "30112345"
```

3. Write a MongoDB query to find the restaurant Id, name and grades for those restaurants where the 2nd element of grades array contains a grade of "A" and score 9 on an ISODate "2014-08-11T00:00:00Z".

```
Filter {  
    grades: {  
        $elemMatch: {  
            grade: "A",  
            score: 9,  
            date: { $date: "2014-08-11T00:00:00Z" }  
        }  
    }  
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffbd3')  
address: Object  
borough: "Manhattan"  
cuisine: "Chinese"  
grades: Array (2)  
name: "Mad Dragon Wok"  
restaurant_id: "30234567"
```

4. Write a MongoDB query to find the restaurant Id, name, address and geographical location for those restaurants where 2nd element of coord array contains a value which is more than 42 and upto 52..

```
Filter  {  
    "address.coord.1": { $gt: 42, $lte: 52 }  
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffbd1')  
► address: Object  
  borough: "Manhattan"  
  cuisine: "Chinese"  
► grades: Array (2)  
  name: "Mad Dragon Wok"  
  restaurant_id: "30234567"
```

5. Write a MongoDB query to arrange the name of the restaurants in ascending order along with all the columns.

```
Filter  {}
```

```
_id: ObjectId('69087fed4c3bc21c7ceffbd1')  
► address: Object  
  borough: "Bronx"  
  cuisine: "Bakery"  
► grades: Array (2)  
  name: "Morris Park Bake Shop"  
  restaurant_id: "30075445"
```

```
_id: ObjectId('69087fed4c3bc21c7ceffbd2')  
► address: Object  
  borough: "Brooklyn"  
  cuisine: "American"  
► grades: Array (2)  
  name: "Wil's BBQ"  
  restaurant_id: "30112345"
```

```
_id: ObjectId('69087fed4c3bc21c7ceffbd3')  
► address: Object  
  borough: "Manhattan"  
  cuisine: "Chinese"  
► grades: Array (2)  
  name: "Mad Dragon Wok"  
  restaurant_id: "30234567"
```

no filters Contact Sales

6. Write a MongoDB query to arrange the name of the restaurants in descending order along with all the columns.

Filter ⚙

{}

```
_id: ObjectId("69087fed4c3bc21c7ceffbd1")
  address: Object
  borough: "Bronx"
  cuisine: "Bakery"
  grades: Array (2)
  name: "Morris Park Bake Shop"
  restaurant_id: "30075445"
```

```
_id: ObjectId("69087fed4c3bc21c7ceffbd2")
  address: Object
  borough: "Brooklyn"
  cuisine: "American"
  grades: Array (2)
  name: "Will's BBQ"
  restaurant_id: "30112345"
```

```
_id: ObjectId("69087fed4c3bc21c7ceffbd3")
  address: Object
  borough: "Manhattan"
  cuisine: "Chinese"
  grades: Array (2)
  name: "Mad Dragon Wok"
  restaurant_id: "30234567"
```

new file · Commit file

7. Write a MongoDB query to arranged the name of the cuisine in ascending order and for that same cuisine borough should be in descending order.

Filter ↗

{}

```
_id: ObjectId('699887fed4c3bc21c7ceffbd1')
▶ address: Object
▶ borough: "Bronx"
▶ cuisine: "Bakery"
▶ grades: Array (2)
▶ name: "Morris Park Bake Shop"
▶ restaurant_id: "30075445"
```

```
_id: ObjectId('699887fed4c3bc21c7ceffbd2')
▶ address: Object
▶ borough: "Brooklyn"
▶ cuisine: "American"
▶ grades: Array (2)
▶ name: "Wil's BBQ"
▶ restaurant_id: "30112345"
```

```
_id: ObjectId('699887fed4c3bc21c7ceffbd3')
▶ address: Object
▶ borough: "Manhattan"
▶ cuisine: "Chinese"
▶ grades: Array (2)
▶ name: "Mad Dragon Wok"
▶ restaurant_id: "30234567"
```

View Bincode | Download Bincode

8. Write a MongoDB query to know whether all the addresses contains the street or not.

Filter ↗

{}

```
_id: ObjectId('69988fed4c3bc21c7ceffbd1')
▶ address: Object
▶ borough: "Bronx"
▶ cuisine: "Bakery"
▶ grades: Array (2)
▶ name: "Morris Park Bake Shop"
▶ restaurant_id: "30075445"
```

```
_id: ObjectId('699887fed4c3bc21c7ceffbd2')
▶ address: Object
▶ borough: "Brooklyn"
▶ cuisine: "American"
▶ grades: Array (2)
▶ name: "Wil's BBQ"
▶ restaurant_id: "30112345"
```

```
_id: ObjectId('699887fed4c3bc21c7ceffbd3')
▶ address: Object
▶ borough: "Manhattan"
▶ cuisine: "Chinese"
▶ grades: Array (2)
▶ name: "Mad Dragon Wok"
▶ restaurant_id: "30234567"
```

no filters | Countertop Online

9. Write a MongoDB query which will select all documents in the restaurants collection where the coord field value is Double.

Filter ↗

{}

```
_id: ObjectId('69088fed4c3bc21c7ceffbd1')
▶ address: Object
▶ borough: "Bronx"
▶ cuisine: "Bakery"
▶ grades: Array (2)
▶ name: "Morris Park Bake Shop"
▶ restaurant_id: "30075445"
```

```
_id: ObjectId('690887fed4c3bc21c7ceffbd2')
▶ address: Object
▶ borough: "Brooklyn"
▶ cuisine: "American"
▶ grades: Array (2)
▶ name: "Wil's BBQ"
▶ restaurant_id: "30112345"
```

```
_id: ObjectId('690887fed4c3bc21c7ceffbd3')
▶ address: Object
▶ borough: "Manhattan"
▶ cuisine: "Chinese"
▶ grades: Array (2)
▶ name: "Mad Dragon Wok"
▶ restaurant_id: "30234567"
```

no filters | Countert Online

10. Write a MongoDB query which will select the restaurant Id, name and grades for those restaurants which returns 0 as a remainder after dividing the score by 7.

Filter ↗

{ name: { \$regex: /mon/i } }

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908acd14c3bc21c7ceffc38')
▶ address: Object
▶ borough: "Manhattan"
▶ cuisine: "Italian"
▶ grades: Array (1)
▶ name: "Monalisa Pizza"
▶ restaurant_id: "30333333"
```

11. Write a MongoDB query to find the restaurant name, borough, longitude and attitude and cuisine for those restaurants which contains 'mon' as three letters somewhere in its name.

Filter ↗

```
{ name: { $regex: /mon/i } }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908acd14c3bc21c7cefffc38')
address: Object
borough: "Manhattan"
cuisine: "Italian"
grades: Array (1)
name: "Monalisa Pizza"
restaurant_id: "30333333"
```

12. Write a MongoDB query to find the restaurant name, borough, longitude and latitude and cuisine for those restaurants which contain 'Mad' as first three letters of its name.

Filter ↗

```
{ name: { $regex: /^Mad/i } }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffb3')
address: Object
borough: "Manhattan"
cuisine: "Chinese"
grades: Array (2)
name: "Mad Dragon Wok"
restaurant_id: "30234567"
```

13. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5.

Filter ↗

```
{ "grades.score": { $lt: 5 } }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffb1')
address: Object
borough: "Bronx"
cuisine: "Bakery"
grades: Array (2)
name: "Morris Park Bake Shop"
restaurant_id: "30075445"
```

14. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan.

```
Filter { "grades.score": { $lt: 5 }, borough: "Manhattan" }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908af9d4c3bc21c7ceffc3f')
address: Object
borough: "Manhattan"
cuisine: "French"
grades: Array (2)
name: "Le Petite Bistro"
restaurant_id: "38444444"
```

15. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn.

```
Filter { "grades.score": { $lt: 5 }, borough: "Manhattan" }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908af9d4c3bc21c7ceffc3f')
address: Object
borough: "Manhattan"
cuisine: "French"
grades: Array (2)
name: "Le Petite Bistro"
restaurant_id: "38444444"
```

16. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn, and their cuisine is not American.

```
Filter { "grades.score": { $lt: 5 }, borough: "Manhattan" }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908af9d4c3bc21c7cefffc3f')
address: Object
borough: "Manhattan"
cuisine: "French"
grades: Array (2)
name: "Le Petite Bistro"
restaurant_id: "38444444"
```

17. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn, and their cuisine is not American or Chinese.

```
Filter { "grades.score": { $lt: 5 }, borough: "Manhattan" }
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908af9d4c3bc21c7cefffc3f')
address: Object
borough: "Manhattan"
cuisine: "French"
grades: Array (2)
name: "Le Petite Bistro"
restaurant_id: "38444444"
```

18. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6.

```
Filter {
  $and: [
    { "grades.score": 2 },
    { "grades.score": 6 }
  ]
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('69087fed4c3bc21c7ceffb1')
address: Object
borough: "Bronx"
cuisine: "Bakery"
grades: Array (2)
name: "Morris Park Bake Shop"
restaurant_id: "30075445"
```

19. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan.

```
Filter {  
    borough: "Manhattan",  
    $and: [  
        { "grades.score": 2 },  
        { "grades.score": 6 }  
    ]  
}  
  
QUERY RESULTS: 1-1 OF 1  
  
_id: ObjectId('6908b0904c3bc21c7ceffc41')  
address: Object  
borough: "Manhattan"  
cuisine: "Italian"  
grades: Array (2)  
name: "Roma Street Dine"  
restaurant_id: "30555555"
```

20. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn.

```
Filter {  
    borough: { $in: ["Manhattan", "Brooklyn"] },  
    $and: [  
        { "grades.score": 2 },  
        { "grades.score": 6 }  
    ]  
}  
  
QUERY RESULTS: 1-1 OF 1  
  
_id: ObjectId('6908b0904c3bc21c7ceffc41')  
address: Object  
borough: "Manhattan"  
cuisine: "Italian"  
grades: Array (2)  
name: "Roma Street Dine"  
restaurant_id: "30555555"
```

21. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn, and their cuisine is not American.

```
Filter {  
  borough: { $in: ["Manhattan", "Brooklyn"] },  
  cuisine: { $ne: "American" },  
  $and: [  
    { "grades.score": 2 },  
    { "grades.score": 6 }  
  ]  
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908b0904c3bc21c7ceffc41')  
address : Object  
borough : "Manhattan"  
cuisine : "Italian"  
grades : Array (2)  
name : "Roma Street Dine"  
restaurant_id : "30555555"
```

22. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn, and their cuisine is not American or Chinese.

```
Filter {  
  borough: { $in: ["Manhattan", "Brooklyn"] },  
  cuisine: { $ne: "American" },  
  $and: [  
    { "grades.score": 2 },  
    { "grades.score": 6 }  
  ]  
}
```

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('6908b0904c3bc21c7ceffc41')  
address : Object  
borough : "Manhattan"  
cuisine : "Italian"  
grades : Array (2)  
name : "Roma Street Dine"  
restaurant_id : "30555555"
```

23. Write a MongoDB query to find the restaurants that have a grade with a score of 2 or a grade with a score of 6.

Generate queries from natural language in Compass

```
Filter {  
  $or: [  
    { "grades.score": 2 },  
    { "grades.score": 6 }  
  ]  
}
```

```
_id: ObjectId('69087fed4c3bc21c7ceffbd1')  
▶ address : Object  
  borough : "Bronx"  
  cuisine : "Bakery"  
▶ grades : Array (2)  
  name : "Morris Park Bake Shop"  
  restaurant_id : "30075445"
```

```
_id: ObjectId('6908b0904c3bc21c7ceffc41')  
▶ address : Object  
  borough : "Manhattan"  
  cuisine : "Italian"  
▶ grades : Array (2)  
  name : "Roma Street Dine"  
  restaurant_id : "30555555"
```

Sample document of 'movies' collection

```
{  
  
  _id: ObjectId("573a1390f29313caabcd42e8"),  
  
  plot: 'A group of bandits stage a brazen train hold-up, only to find a determined posse hot on their  
heels.', genres: [ 'Short', 'Western' ], runtime: 11,  
  
  cast: [  
  
    'A.C. Abadie',  
  
    "Gilbert M. 'Broncho Billy' Anderson",  
  
    'George Barnes',  
  
    'Justus D. Barnes'  
  
  ],  
  
  poster: 'https://m.media-  
  
amazon.com/images/M/MV5BMTU3NjE5NzYtYTYYNS00MDVmLWIwYjgtMmYwYWIxZDYyNzU2XkEyX  
kFqcG  
  
deQXVvNzQzNzQxNzI@._V1_SY1000_SX677_AL_.jpg',  
  
  title: 'The Great Train Robbery',
```

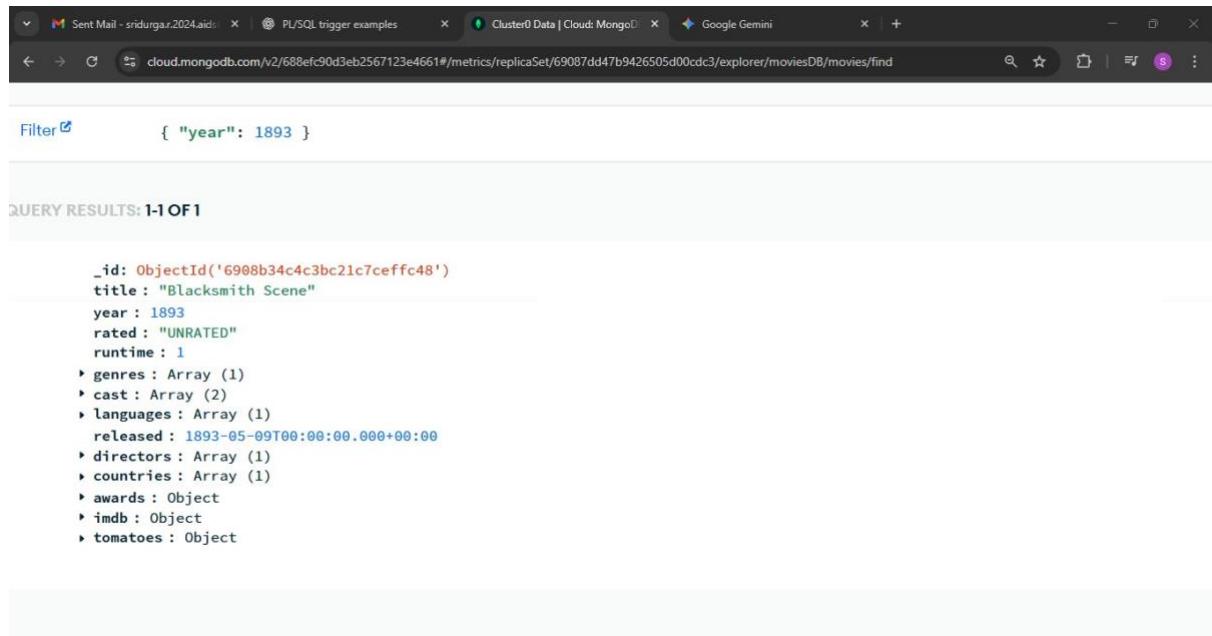
fullplot: "Among the earliest existing films in American cinema - notable as the first film that presented a

narrative story to tell - it depicts a group of cowboy outlaws who hold up a train and rob the passengers.

They are then pursued by a Sheriff's posse. Several scenes have color included - all hand tinted.",

languages: ['English'], released: ISODate("1903-12-01T00:00:00.000Z"), directors: ['Edwin S. Porter'],
rated: 'TV-G', awards: { wins: 1, nominations: 0, text: '1 win.' }, lastupdated: '2015-08-13
00:27:59.177000000', year: 1903, imdb: { rating: 7.4, votes: 9847, id: 439 }, countries: ['USA'], type:
'movie', tomatoes: { viewer: { rating: 3.7, numReviews: 2559, meter: 75 }, fresh: 6, critic: {
rating: 7.6, numReviews: 6, meter: 100 }, rotten: 0, lastUpdated: ISODate("2015-08-08T19:16:10.000Z")
}

1. Find all movies with full information from the 'movies' collection that released in the year 1893.



The screenshot shows a browser window with several tabs open. The active tab is titled 'Cluster0 Data | Cloud: MongoDB' and displays a MongoDB query in the address bar: 'cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find'. Below the address bar, there is a 'Filter' button and a query selector: '{ "year": 1893 }'. The results section is titled 'QUERY RESULTS: 1-1 OF 1' and contains one document:

```
_id: ObjectId('6908b34c4c3bc21c7cefffc48')
title: "Blacksmith Scene"
year: 1893
rated: "UNRATED"
runtime: 1
genres: Array (1)
cast: Array (2)
languages: Array (1)
released: 1893-05-09T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object
```

2. Find all movies with full information from the 'movies' collection that have a runtime greater than 120 minutes. x

```

Filter { "runtime": { "$gt": 120 } }

QUERY RESULTS: 1-2 OF 2

_id: ObjectId('6908b34c4c3bc21c7cefffc4a')
title: "The Endless Journey"
year: 2019
rated: "UNRATED"
runtime: 145
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2019-02-11T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc4b')

```

3. Find all movies with full information from the 'movies' collection that have "Short" genre.

```

Filter { "genres": "short" }

QUERY RESULTS: 1-3 OF 3

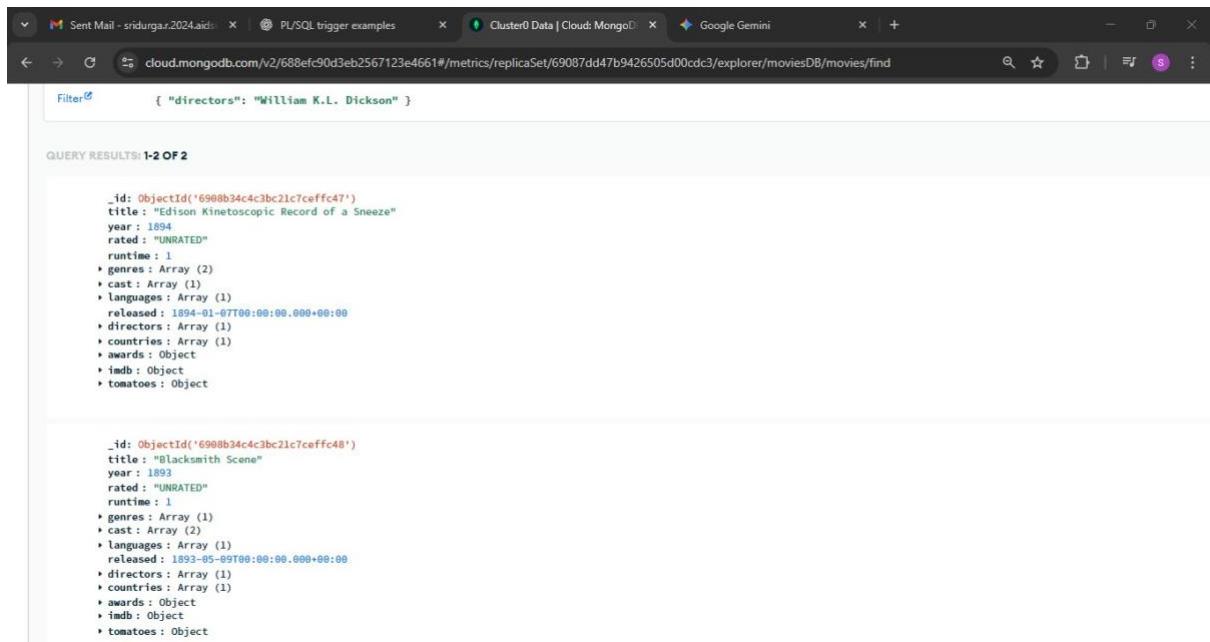
_id: ObjectId('6908b34c4c3bc21c7cefffc46')
title: "The Great Train Robbery"
year: 1903
rated: "TV-G"
runtime: 11
genres: Array (2)
cast: Array (4)
languages: Array (1)
released: 1903-12-01T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc47')
title: "Edison Kinetoscopic Record of a Sneeze"
year: 1894
rated: "UNRATED"
runtime: 1
genres: Array (2)
cast: Array (1)
languages: Array (1)
released: 1894-01-07T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc48')
title: "Blacksmith Scene"
year: 1893
rated: "UNRATED"
runtime: 1
genres: Array (1)
cast: Array (2)
languages: Array (1)
released: 1893-05-09T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

```

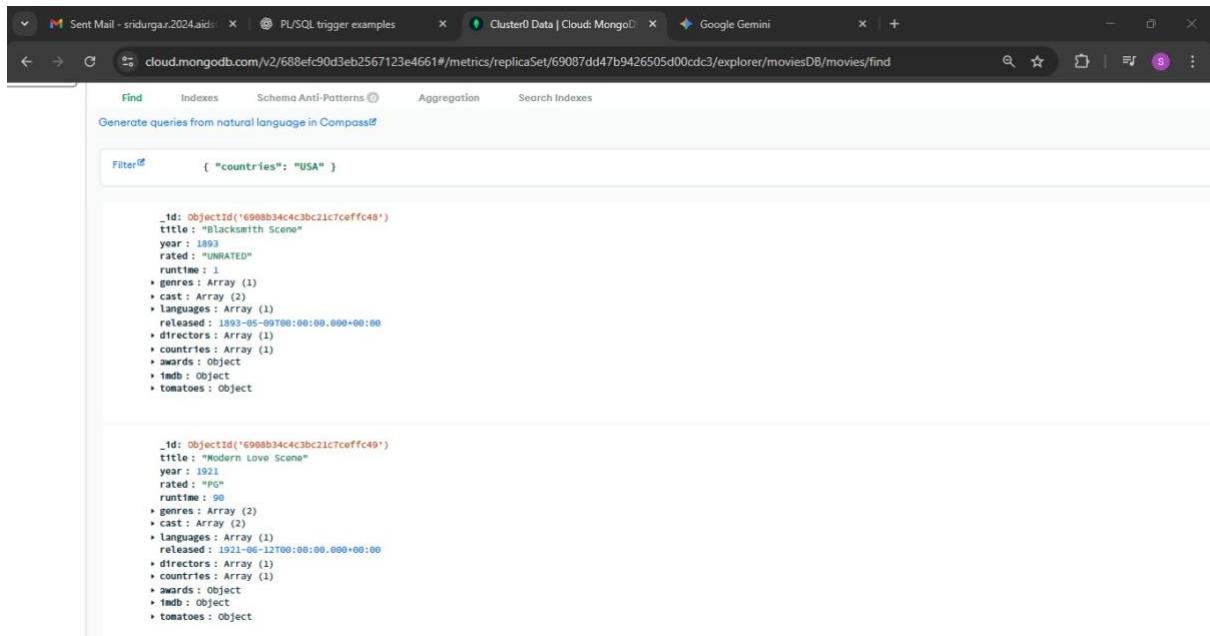
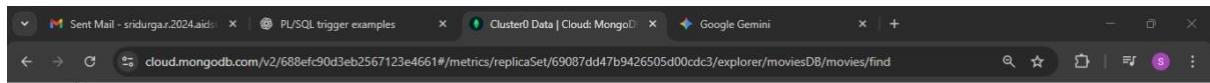
4. Retrieve all movies from the 'movies' collection that were directed by "William K.L. Dickson" and include complete information for each movie.



The screenshot shows a MongoDB browser window with two movie documents listed under the query results. The first document is for "Edison Kinetoscopic Record of a Sneeze" (1894) and the second is for "Blacksmith Scene" (1893). Both documents include fields like _id, title, year, rated, runtime, genres, cast, languages, released, directors, countries, awards, imbd, and tomatoes.

```
{ "_id": ObjectId('6908b34c4c3bc21c7cefffc47'),  
  title: "Edison Kinetoscopic Record of a Sneeze",  
  year: 1894,  
  rated: "UNRATED",  
  runtime: 1,  
  genres: Array (2),  
  cast: Array (1),  
  languages: Array (1),  
  released: 1894-01-07T00:00:00.000+00:00,  
  directors: Array (1),  
  countries: Array (1),  
  awards: Object,  
  imbd: Object,  
  tomatoes: Object  
  
{ "_id": ObjectId('6908b34c4c3bc21c7cefffc48'),  
  title: "Blacksmith Scene",  
  year: 1893,  
  rated: "UNRATED",  
  runtime: 1,  
  genres: Array (1),  
  cast: Array (2),  
  languages: Array (1),  
  released: 1893-05-09T00:00:00.000+00:00,  
  directors: Array (1),  
  countries: Array (1),  
  awards: Object,  
  imbd: Object,  
  tomatoes: Object }
```

5. Retrieve all movies from the 'movies' collection that were released in the USA and include complete information for each movie.



```

_released : 1921-06-12T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

_id: ObjectId('6908b34c4c3bc21c7ceffca')
title : "The Endless Journey"
year : 2019
rated : "UNRATED"
runtime : 145
  ↳ genres : Array (2)
  ↳ cast : Array (2)
  ↳ languages : Array (1)
  ↳ released : 2019-02-11T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

_id: ObjectId('6908b34c4c3bc21c7ceffcb')
title : "The Secret Scene"
year : 2020
rated : "PG-13"
  ↳ genres : Array (2)
  ↳ cast : Array (2)
  ↳ languages : Array (1)
  ↳ released : 2020-08-15T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

```

6. Retrieve all movies from the 'movies' collection that have complete information and are rated as "UNRATED".

```

Filter: { "rated": "UNRATED" }

QUERY RESULTS: 1-3 OF 3

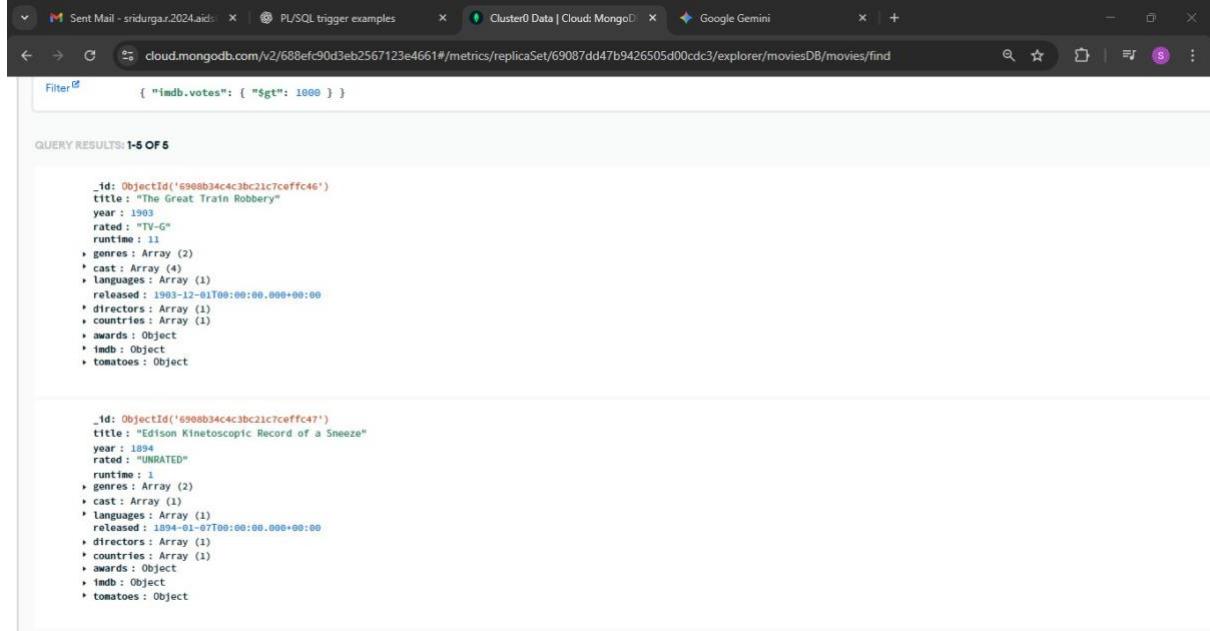
_id: ObjectId('6908b34c4c3bc21c7ceffc47')
title : "Edison Kinetoscopic Record of a Sneeze"
year : 1894
rated : "UNRATED"
runtime : 1
  ↳ genres : Array (2)
  ↳ cast : Array (1)
  ↳ languages : Array (1)
  ↳ released : 1894-01-07T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

_id: ObjectId('6908b34c4c3bc21c7ceffc48')
title : "Blacksmith Scene"
year : 1893
rated : "UNRATED"
runtime : 1
  ↳ genres : Array (1)
  ↳ cast : Array (2)
  ↳ languages : Array (1)
  ↳ released : 1893-05-09T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

_id: ObjectId('6908b34c4c3bc21c7ceffca')
title : "The Endless Journey"
year : 2019
rated : "UNRATED"
runtime : 145
  ↳ genres : Array (2)
  ↳ cast : Array (2)
  ↳ languages : Array (1)
  ↳ released : 2019-02-11T00:00:00.000+00:00
  ↳ directors : Array (1)
  ↳ countries : Array (1)
  ↳ awards : Object
  ↳ imdb : Object
  ↳ tomatoes : Object

```

7. Retrieve all movies from the 'movies' collection that have complete information and have received more than 1000 votes on IMDb.

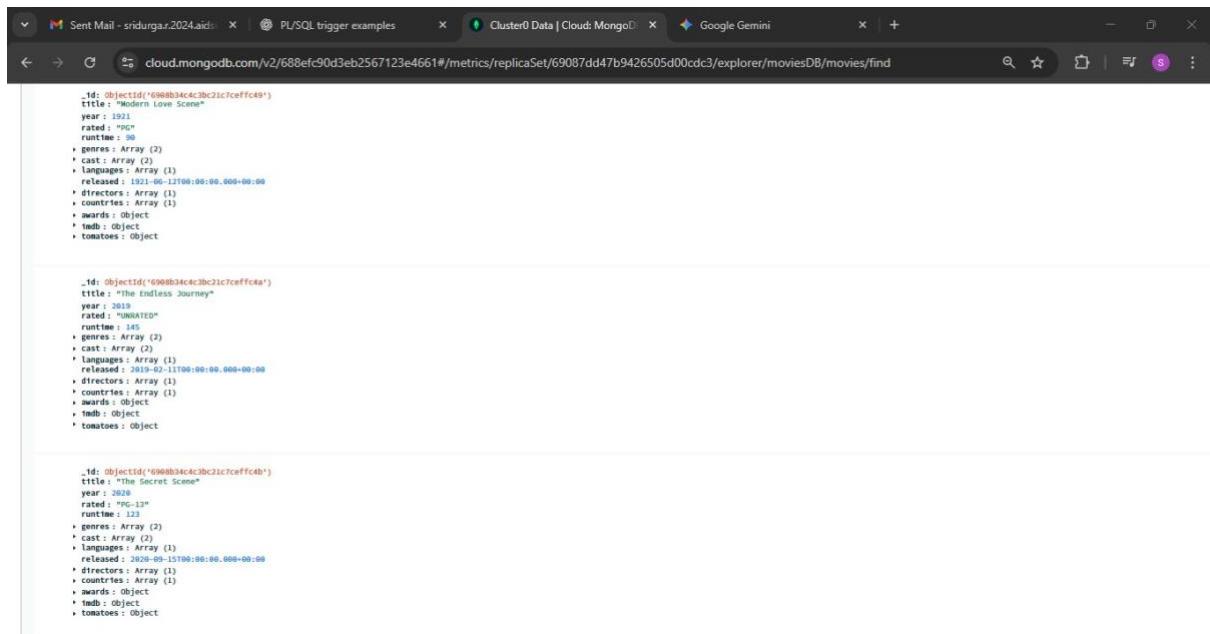


```
Filter: { "imdb.votes": { "$gt": 1000 } }

QUERY RESULTS: 1-5 OF 5

_id: ObjectId('6908b34c4c3bc21c7cefffc46')
title: "The Great Train Robbery"
year: 1903
rated: "TV-G"
runtime: 11
genres: Array (2)
cast: Array (4)
languages: Array (1)
released: 1903-12-01T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc47')
title: "Edison Kinetoscopic Record of a Sneeze"
year: 1894
rated: "UNRATED"
runtime: 1
genres: Array (2)
cast: Array (1)
languages: Array (1)
released: 1894-01-07T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object
```

```
_id: ObjectId('6908b34c4c3bc21c7cefffc49')
title: "Mornin' Love Scene"
year: 1921
rated: "PG"
runtime: 98
genres: Array (2)
cast: Array (1)
languages: Array (1)
released: 1921-06-12T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc4a')
title: "The Endless Journey"
year: 2019
rated: "UNRATED"
runtime: 115
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2019-02-11T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7cefffc4b')
title: "The Secret Scene"
year: 2028
rated: "PG-13"
runtime: 120
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2028-09-15T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object
```

8. Retrieve all movies from the 'movies' collection that have complete information and have an IMDb rating higher than 7.

The screenshot shows two separate queries run against the 'moviesDB.movies' collection in MongoDB Compass.

Query 1:

```
Filter: { "imdb.rating": { "$gt": 7 } }
```

QUERY RESULTS: 1-4 OF 4

```
_id: ObjectId('690bb34c4c3bc21c7ceffca6')
title: "The Great Train Robbery"
year: 1903
rated: "PG"
runtime: 11
genres: Array (2)
cast: Array (4)
languages: Array (1)
released: 1903-12-01T00:00:00.000+00:00
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('e990bb34c4c3bc21c7ceffca9')
title: "Modern Love Scene"
year: 1921
rated: "PC"
runtime: 98
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 1921-06-12T08:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object
```

Query 2:

```
+ awards: Object
+ imdb: Object
+ tomatoes: Object
```

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('690bb34c4c3bc21c7ceffca4')
title: "The Endless Journey"
year: 2019
rated: "UNRATED"
runtime: 145
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2019-03-11T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('690bb34c4c3bc21c7ceffca5')
title: "The Secret Scene"
year: 2019
rated: "PG-13"
runtime: 123
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2019-03-09-15T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object
```

9. Retrieve all movies from the 'movies' collection that have complete information and have a viewer rating higher than 4 on Tomatoes.

Filter: { "tomatoes.viewer.rating": { "\$gt": 4 } }

QUERY RESULTS: 1-4 OF 4

```

_id: ObjectId('6908b34c4c3bc21c7ceffc47')
title: "Edison Kinetoscopic Record of a Sneeze"
year: 1894
rated: "UNRATED"
runtime: 1
genres: Array (2)
cast: Array (1)
languages: Array (1)
released: 1894-01-07T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7ceffc49')
title: "Modern Love Scene"
year: 1921
rated: "NR"
runtime: 89
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 1921-06-12T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7ceffc4a')
title: "The Endless Journey"

```

← → ⌂ cloud.mongodb.com/v2/688efc90d3eb2567123e4661#metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find

← → ⌂ cloud.mongodb.com/v2/688efc90d3eb2567123e4661#metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find

```

* awards: Object
* tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7ceffc4a')
title: "The Endless Journey"
year: 2019
rated: "UNRATED"
runtime: 145
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2019-02-11T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

_id: ObjectId('6908b34c4c3bc21c7ceffc4b')
title: "The Secret Scene"
year: 2020
rated: "PG-13"
runtime: 123
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2020-09-15T00:00:00.000+00:00
directors: Array (1)
countries: Array (1)
awards: Object
imdb: Object
tomatoes: Object

```

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10. Retrieve all movies from the 'movies' collection that have received an award.

The screenshot shows two separate queries in a MongoDB browser. Both queries use the same filter: `{ "awards.wins": { "$gt": 0 } }`. The first query returns four results, and the second query also returns four results. Each result is a detailed object representing a movie document from the 'movies' collection.

```

Filter: { "awards.wins": { "$gt": 0 } }

QUERY RESULTS: 1-4 OF 4

{
  "_id: ObjectId('6908b34c4c3bc21c7cefffc46')",
  "title: "The Great Train Robbery",
  "year: 1903,
  "rated: "TV-G",
  "runtime: 11,
  "genres: Array (2),
  "cast: Array (4),
  "languages: Array (1),
  "released: 1903-12-01T00:00:00.000+00:00,
  "directors: Array (1),
  "countries: Array (1),
  "awards: Object,
  "imdb: Object,
  "tomatoes: Object
}

{
  "_id: ObjectId('6908b34c4c3bc21c7cefffc49')",
  "title: "Modern Love Scene",
  "year: 1921,
  "rated: "PG",
  "runtime: 90,
  "genres: Array (2),
  "cast: Array (2),
  "languages: Array (1),
  "released: 1921-06-12T00:00:00.000+00:00,
  "directors: Array (1),
  "countries: Array (1),
  "awards: Object,
  "imdb: Object,
  "tomatoes: Object
}

QUERY RESULTS: 1-4 OF 4

{
  "_id: ObjectId('6908b34c4c3bc21c7cefffc4a')",
  "title: "The Endless Journey",
  "year: 2019,
  "rated: "UNRATED",
  "runtime: 145,
  "genres: Array (2),
  "cast: Array (2),
  "languages: Array (1),
  "released: 2019-02-11T00:00:00.000+00:00,
  "directors: Array (1),
  "countries: Array (1),
  "awards: Object,
  "imdb: Object,
  "tomatoes: Object
}

{
  "_id: ObjectId('6908b34c4c3bc21c7cefffc4b')",
  "title: "The Secret Scene",
  "year: 2020,
  "rated: "PG-13",
  "runtime: 123,
  "genres: Array (2),
  "cast: Array (2),
  "languages: Array (1),
  "released: 2020-09-15T00:00:00.000+00:00,
  "directors: Array (1),
  "countries: Array (1),
  "awards: Object,
  "imdb: Object,
  "tomatoes: Object
}

```

11. Find all movies with title, languages, released, directors, writers, awards, year, genres, runtime, cast, countries from the 'movies' collection in MongoDB that have at least one nomination.

The screenshot shows the MongoDB Compass interface. On the left, there's a sidebar with various tools like 'Line Tools' and 'Vector Search'. The main area is titled 'moviesDB.movies' and shows a query builder. The query is:

```

Filter if: { "awards.nominations": { "$gt": 0 } }

Project:
  - directors
  - writers
  - runtime
  - year
  - genres
  - cast
  - languages
  - released
  - directors
  - countries
  - awards
  - id

```

Sort: { field: -1 } or [{}]
Collection: { locale: 'simple' }

QUERY RESULTS: 1-4 OF 4

```

title : "Edison Kinetoscopic Record of a Sneeze"
year : 1894
runtime : 120
genres : Array (2)
  - drama
  - comedy
cast : Array (1)
languages : Array (1)
released : 1894-01-07T00:00:00+00:00
directors : Array (1)
countries : Array (1)
awards : Object

```

System Status: All Good
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The screenshot shows the MongoDB Compass interface. The sidebar and overall layout are identical to the first screenshot. The query is:

```

Filter if: { "awards.nominations": { "$gt": 0 } }

Project:
  - title
  - year
  - runtime
  - genres
  - cast
  - languages
  - released
  - directors
  - countries
  - awards
  - id

```

Sort: { field: -1 } or [{}]
Collection: { locale: 'simple' }

QUERY RESULTS: 1-2 OF 2

```

title : "The Endless Journey"
year : 2019
runtime : 145
genres : Array (2)
  - drama
  - science fiction
cast : Array (2)
languages : Array (1)
released : 2019-02-11T00:00:00+00:00
directors : Array (1)
countries : Array (1)
awards : Object

title : "The Secret Scene"
year : 2020
runtime : 123
genres : Array (2)
cast : Array (2)
languages : Array (1)
released : 2020-09-15T00:00:00+00:00
directors : Array (1)
countries : Array (1)
awards : Object

```

System Status: All Good
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12. Find all movies with title, languages, released, directors, writers, awards, year, genres, runtime, cast, countries from the 'movies' collection in MongoDB with cast including "Charles Kayser".

The screenshot shows the MongoDB Compass interface. In the top navigation bar, there are tabs for 'Find', 'Indexes', 'Schema Anti Patterns', 'Aggregation', and 'Search indexes'. The 'Find' tab is active. The main area has a heading 'Generate queries from natural language in Compass' and a 'Filter' section containing the query '{ "cast": "Charles Kayser" }'. Below this, a 'QUERY RESULTS: 1-1 OF 1' section displays the document structure of a movie:

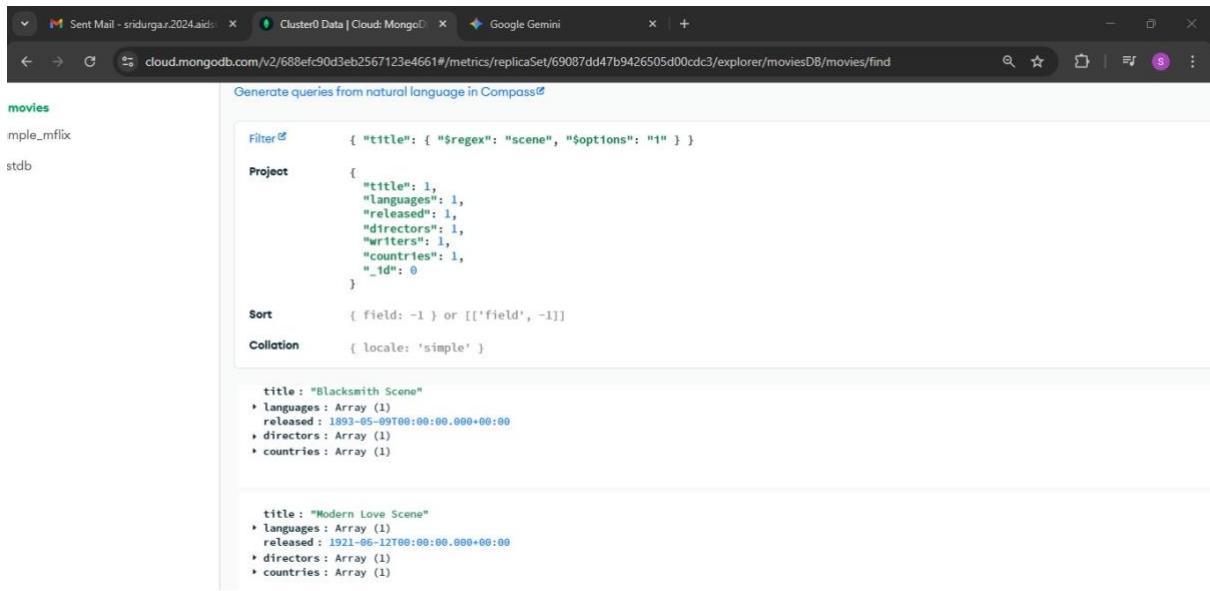
```
title : "Blacksmith Scene"
year : 1893
runtime : 1
▶ genres : Array (1)
▶ cast : Array (2)
▶ languages : Array (1)
released : 1893-05-09T00:00:00.000+00:00
▶ directors : Array (1)
▶ countries : Array (1)
▶ awards : Object
```

13. Retrieve all movies with title, languages, released, directors, writers, countries from the 'movies' collection in MongoDB that released on May 9, 1893.

The screenshot shows the MongoDB Compass interface. The 'Find' tab is active. The 'Filter' section contains the query '{ "released": { "\$eq": ISODate("1893-05-09T00:00:00.000Z") } }'. Below it, the 'Project' section includes fields for title, languages, released, directors, writers, and countries. The 'Sort' and 'Collation' sections are also present. A 'QUERY RESULTS: 1-1 OF 1' section shows the document structure of a movie:

```
title : "Blacksmith Scene"
▶ languages : Array (1)
released : 1893-05-09T00:00:00.000+00:00
▶ directors : Array (1)
▶ countries : Array (1)
```

14. Retrieve all movies with title, languages, released, directors, writers, countries from the 'movies' collection in MongoDB that have a word "scene" in the title.



Generate queries from natural language in Compass

movies

multiple_mflix
stdb

Filter { "title": { "\$regex": "scene", "\$options": "i" } }

Project { "title": 1, "languages": 1, "released": 1, "directors": 1, "writers": 1, "countries": 1, "_id": 0 }

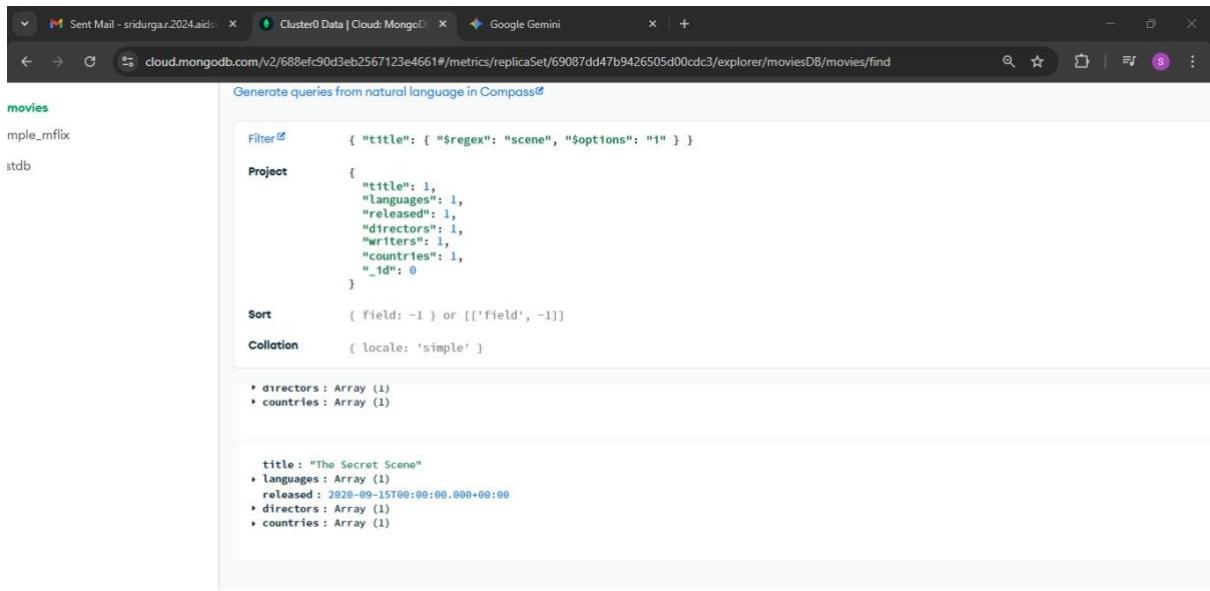
Sort { field: -1 } or [['field', -1]]

Collection { locale: 'simple' }

title : "Blacksmith Scene"
► languages : Array (1)
► released : 1893-05-09T00:00:00.000+00:00
► directors : Array (1)
► countries : Array (1)

title : "Modern Love Scene"
► languages : Array (1)
► released : 1921-06-12T00:00:00.000+00:00
► directors : Array (1)
► countries : Array (1)

Status: All Good



Generate queries from natural language in Compass

movies

multiple_mflix
stdb

Filter { "title": { "\$regex": "secret", "\$options": "i" } }

Project { "title": 1, "languages": 1, "released": 1, "directors": 1, "writers": 1, "countries": 1, "_id": 0 }

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

Collection { locale: 'simple' }

► directors : Array (1)
► countries : Array (1)

title : "The Secret Scene"
► languages : Array (1)
► released : 2020-09-15T00:00:00.000+00:00
► directors : Array (1)
► countries : Array (1)

Status: All Good