

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'.

Filter 

```
{
  $or: [
    { cuisine: { $nin: ["American", "Chinese"] } },
    { name: { $regex: /^Wil/i } }
  ]
}
```

Reset Apply Options 

_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"

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": {
    "borough": "Brooklyn",
    "cuisine": "American"
  },
  "grades": [
    {
      "grade": "A",
      "score": 11,
      "date": "2014-08-11T00:00:00Z"
    },
    {
      "grade": "B",
      "score": 10,
      "date": "2014-08-11T00:00:00Z"
    }
  ],
  "name": "Wil's BBQ",
  "restaurant_id": "30112345"
}
```

- 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": {
    "borough": "Manhattan",
    "cuisine": "Chinese"
  },
  "grades": [
    {
      "grade": "B",
      "score": 10,
      "date": "2014-08-11T00:00:00Z"
    },
    {
      "grade": "A",
      "score": 9,
      "date": "2014-08-11T00:00:00Z"
    }
  ],
  "name": "Mad Dragon Wok",
  "restaurant_id": "30234567"
}
```

- 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('69087fed4c3bc21c7ceffbd3'),
  "address": {
    "borough": "Manhattan",
    "cuisine": "Chinese",
    "grades": [
      "A",
      "B"
    ],
    "name": "Mad Dragon Wok",
    "restaurant_id": "30234567"
  }
}
```

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

Filter 

```
{}
```

```
{
  "_id": ObjectId('69087fed4c3bc21c7ceffbd1'),
  "address": {
    "borough": "Bronx",
    "cuisine": "Bakery",
    "grades": [
      "A",
      "B"
    ],
    "name": "Morris Park Bake Shop",
    "restaurant_id": "30075445"
  }
}
```

```
{
  "_id": ObjectId('69087fed4c3bc21c7ceffbd2'),
  "address": {
    "borough": "Brooklyn",
    "cuisine": "American",
    "grades": [
      "A",
      "B"
    ],
    "name": "Wil's BBQ",
    "restaurant_id": "30112345"
  }
}
```

```
{
  "_id": ObjectId('69087fed4c3bc21c7ceffbd3'),
  "address": {
    "borough": "Manhattan",
    "cuisine": "Chinese",
    "grades": [
      "A",
      "B"
    ],
    "name": "Mad Dragon Wok",
    "restaurant_id": "30234567"
  }
}
```

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

Filter 

{}

```
_id: ObjectId('69987fed4c3bc21c7ceffbd1')
address: Object
borough: "Bronx"
cuisine: "Bakery"
grades: Array (2)
name: "Morris Park Bake Shop"
restaurant_id: "38875445"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd2')
address: Object
borough: "Brooklyn"
cuisine: "American"
grades: Array (2)
name: "Wil's BBQ"
restaurant_id: "38112345"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd3')
address: Object
borough: "Manhattan"
cuisine: "Chinese"
grades: Array (2)
name: "Mad Dragon Wok"
restaurant_id: "38234567"
```

no limit Constant Select

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('69987fed4c3bc21c7ceffbd1')
  address: Object
    borough: "Bronx"
    cuisine: "Bakery"
  grades: Array (2)
  name: "Morris Park Bake Shop"
  restaurant_id: "38875445"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd2')
  address: Object
    borough: "Brooklyn"
    cuisine: "American"
  grades: Array (2)
  name: "Wil's BBQ"
  restaurant_id: "38112345"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd3')
  address: Object
    borough: "Manhattan"
    cuisine: "Chinese"
  grades: Array (2)
  name: "Mad Dragon Wok"
  restaurant_id: "38234567"
```

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

Filter 

{}

```
_id: ObjectId('69987fed4c3bc21c7ceffbd1')
  address: Object
    borough: "Bronx"
    cuisine: "Bakery"
  grades: Array (2)
  name: "Morris Park Bake Shop"
  restaurant_id: "38875445"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd2')
  address: Object
    borough: "Brooklyn"
    cuisine: "American"
  grades: Array (2)
  name: "Wil's BBQ"
  restaurant_id: "38112345"
```

```
_id: ObjectId('69987fed4c3bc21c7ceffbd3')
  address: Object
    borough: "Manhattan"
    cuisine: "Chinese"
  grades: Array (2)
  name: "Mad Dragon Wok"
  restaurant_id: "38234567"
```

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

Filter  {}

```

_id: ObjectId('69987fed4c3bc21c7ceffbd1')
address: Object
  borough: "Bronx"
  cuisine: "Bakery"
grades: Array (2)
name: "Morris Park Bake Shop"
restaurant_id: "38875445"

_id: ObjectId('69987fed4c3bc21c7ceffbd2')
address: Object
  borough: "Brooklyn"
  cuisine: "American"
grades: Array (2)
name: "Wil's BBQ"
restaurant_id: "38112345"

_id: ObjectId('69987fed4c3bc21c7ceffbd3')
address: Object
  borough: "Manhattan"
  cuisine: "Chinese"
grades: Array (2)
name: "Mad Dragon Wok"
restaurant_id: "38234567"

```

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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('6998acd14c3bc21c7ceffc38')
address: Object
  borough: "Manhattan"
  cuisine: "Italian"
grades: Array (1)
name: "Monalisa Pizza"
restaurant_id: "38333333"

```

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("6908acd14c3bc21c7ceffc38"),
  "address": {
    "borough": "Manhattan",
    "cuisine": "Italian"
  },
  "grades": [
    {
      "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("69087fed4c3bc21c7ceffbd3"),
  "address": {
    "borough": "Manhattan",
    "cuisine": "Chinese"
  },
  "grades": [
    {
      "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("69087fed4c3bc21c7ceffbd1"),
  "address": {
    "borough": "Bronx",
    "cuisine": "Bakery"
  },
  "grades": [
    {
      "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('6908af9d4c3bc21c7ceffc3f')
address: Object
  borough: "Manhattan"
  cuisine: "French"
grades: Array (2)
  name: "Le Petite Bistro"
  restaurant_id: "30444444"
```

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('6908af9d4c3bc21c7ceffc3f')
address: Object
  borough: "Manhattan"
  cuisine: "French"
grades: Array (2)
  name: "Le Petite Bistro"
  restaurant_id: "30444444"
```

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('69087fed4c3bc21c7ceffbd1')
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('6998b0994c3bc21c7ceffc41')
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('6998b0994c3bc21c7ceffc41')
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.

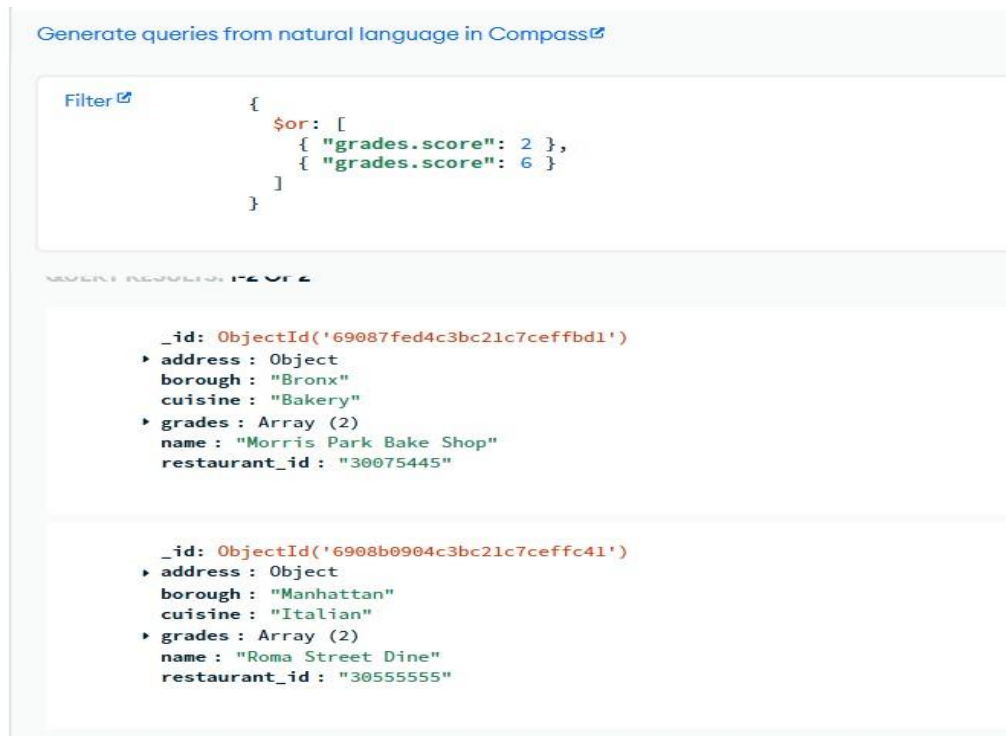
Filter 

```
{
  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.



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/MV5BMTU3NjE5NzYtYTtyNS00MDVmLWlwYjgtMmYwYWlxZDYyNzU2XkEyXkFqcGdeQXVyNzQzNzQxNzI@._V1_SY1000_SX677_AL_.jpg',
  title: 'The Great Train Robbery',
}
```

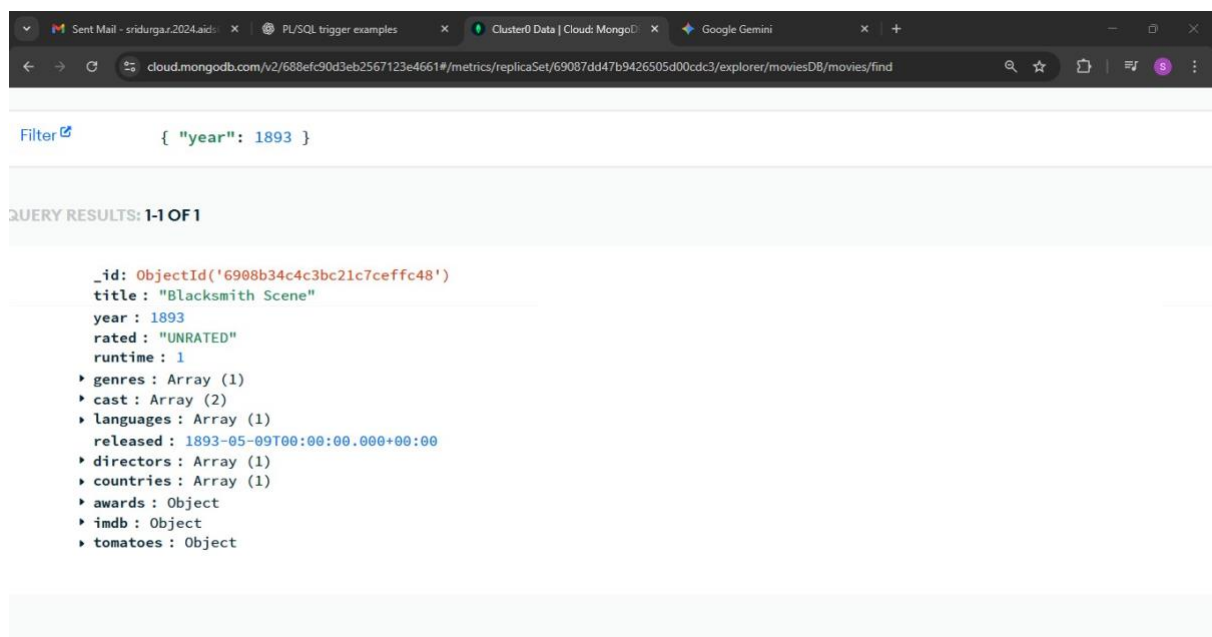
fullplot: "Among the earliest existing films in American cinema - notable as the first film that presented a

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.



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('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')

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

Filter { "genres": "Short" }

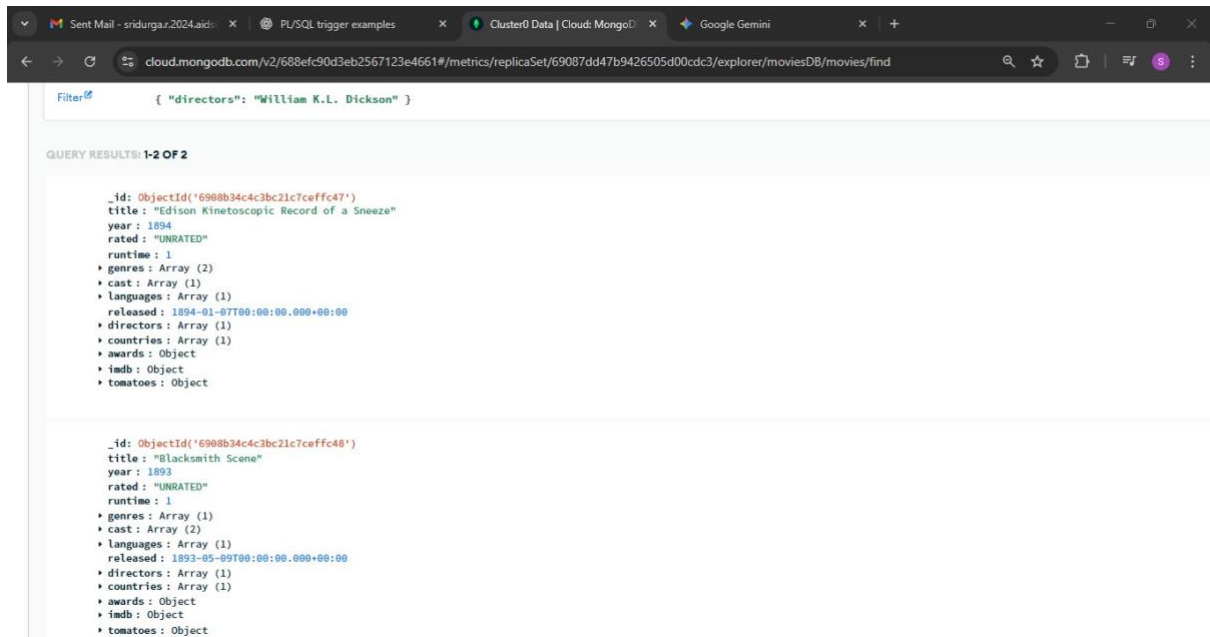
QUERY RESULTS: 1-3 OF 3

```
{
  "_id": ObjectId('6908b34c4c3bc21c7ceffc46'),
  "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('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
}
```


- 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 web browser window with the MongoDB Explorer interface. The address bar shows the URL: `cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find`. The filter bar at the top contains the query: `{ "directors": "William K.L. Dickson" }`. Below the filter bar, the query results are displayed, showing 2 results. The first result is for the movie "Edison Kinetoscopic Record of a Sneeze" (1894), and the second result is for the movie "Blacksmith Scene" (1893). Both results include complete information such as title, year, runtime, genres, cast, languages, release date, directors, countries, awards, IMDb, and Tomatoes.

```
Filter { "directors": "William K.L. Dickson" }

QUERY RESULTS: 1-2 OF 2

{
  "_id": ObjectId("6908b34c43bc21c7ceffc47"),
  "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("6908b34c43bc21c7ceffc48"),
  "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
}
```

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

Browser tabs: Sent Mail - sridurgar.2024.aid: x, PU/SQL trigger examples x, Cluster0 Data | Cloud: MongoD x, Google Gemini x, +

Address bar: cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cd3/explorer/moviesDB/movies/find

Navigation: Find, Indexes, Schema Anti-Patterns, Aggregation, Search Indexes

Generate queries from natural language in Compass

Filter { "countries": "USA" }

QUERY RESULTS: 1-6 OF 6

```
{
  "_id": ObjectId("6908b34c4c3bc21c7ceffc46"),
  "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("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
}
```

Browser tabs: Sent Mail - sridurgar.2024.aid: x, PU/SQL trigger examples x, Cluster0 Data | Cloud: MongoD x, Google Gemini x, +

Address bar: cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cd3/explorer/moviesDB/movies/find

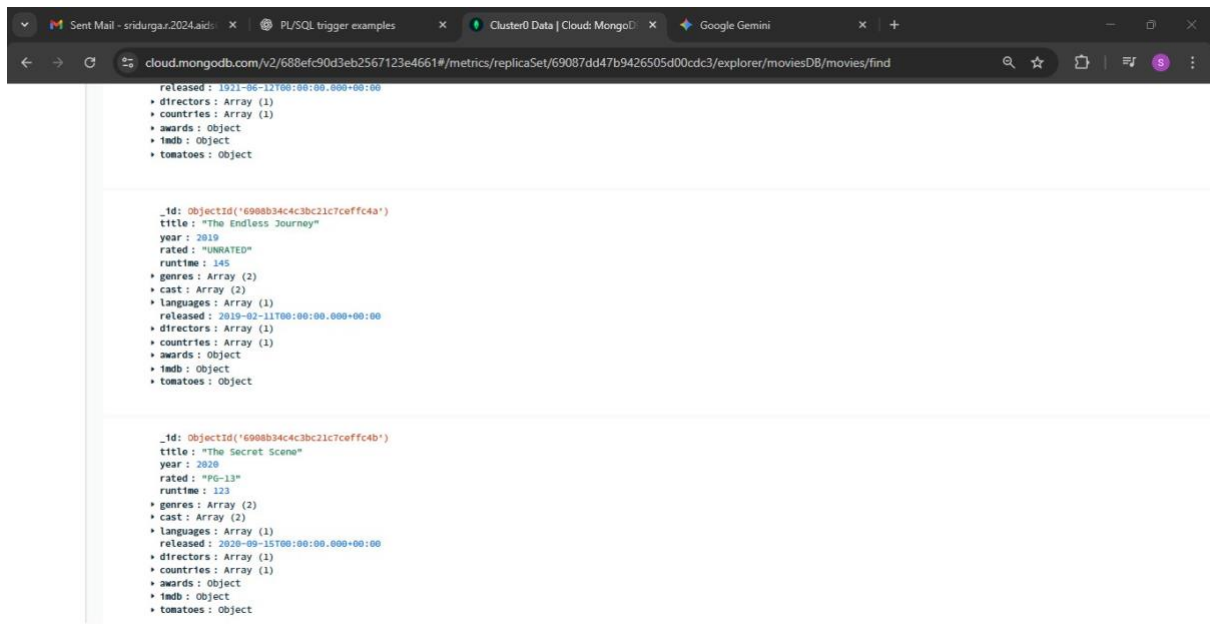
Navigation: Find, Indexes, Schema Anti-Patterns, Aggregation, Search Indexes

Generate queries from natural language in Compass

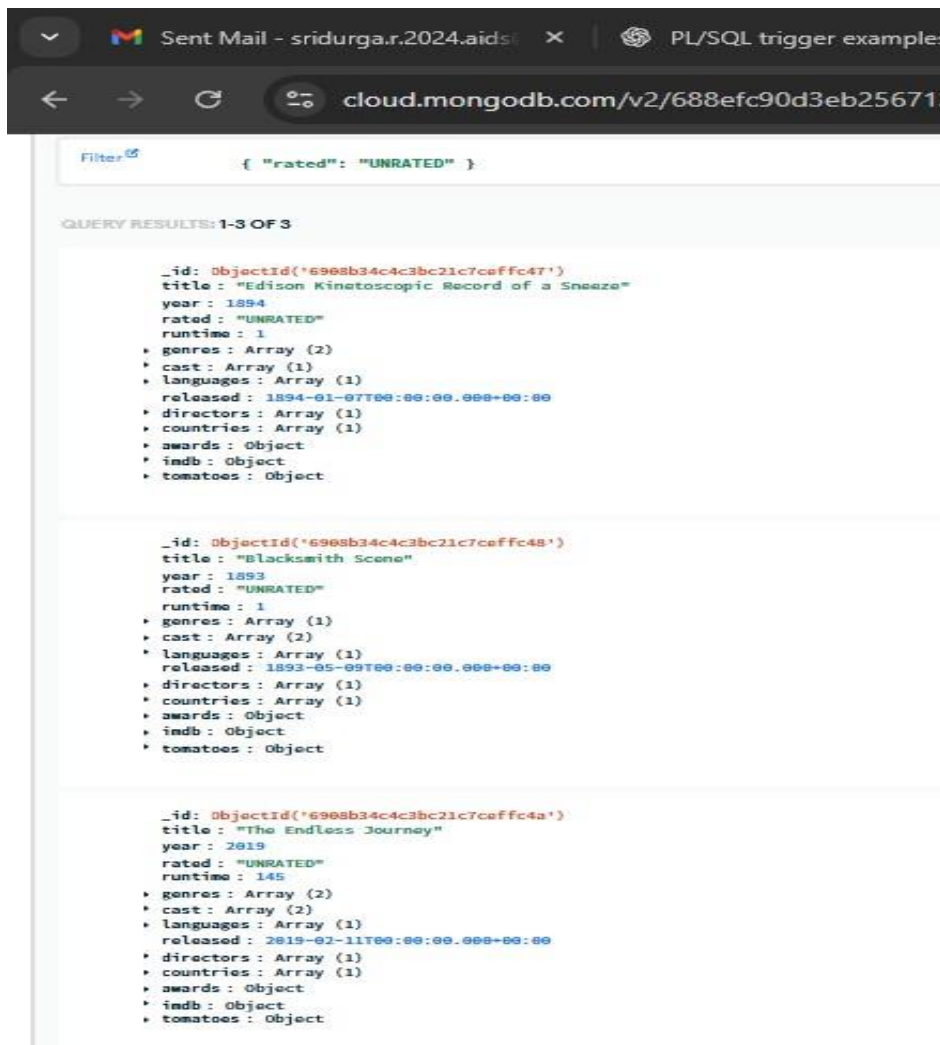
Filter { "countries": "USA" }

```
{
  "_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
}
```

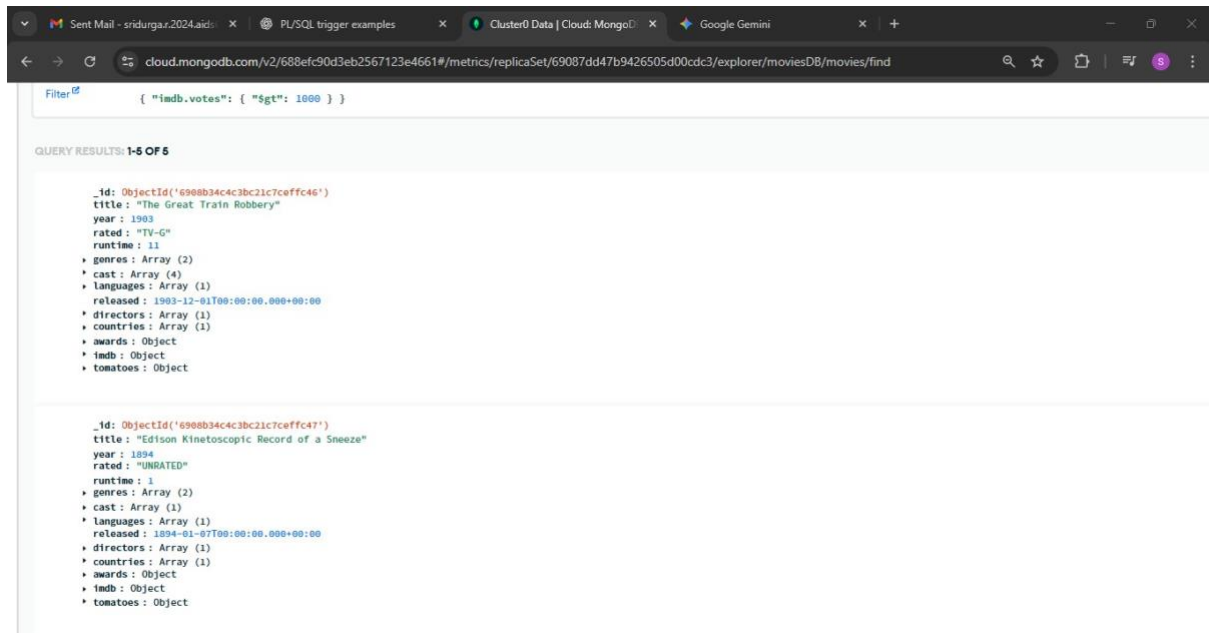
```
{
  "_id": ObjectId("6908b34c4c3bc21c7ceffc49"),
  "title": "Modern Love Scene",
  "year": 1921,
  "rated": "PG",
  "runtime": 90,
  "genres": Array (2)
  * cast: Array (2)
  * languages: Array (1)
  * released: 1921-06-12T00:00:00.000+00:00
  * directors: Array (1)
  * countries: Array (1)
  * awards: Object
  * imdb: Object
  * tomatoes: Object
}
```



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



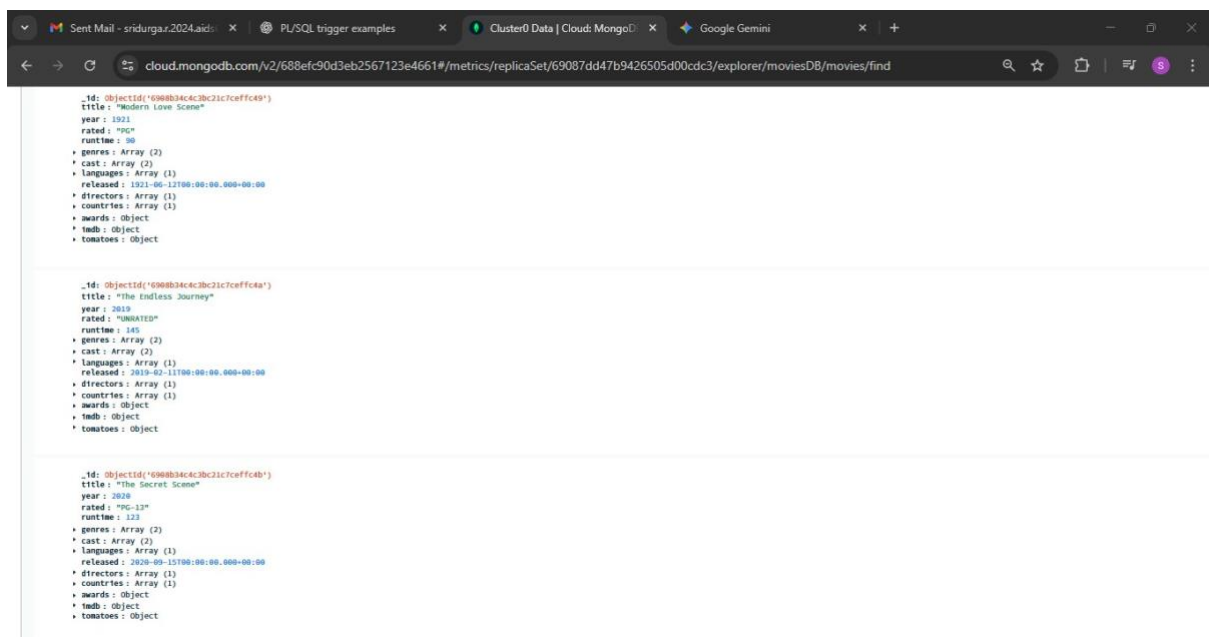
7. Retrieve all movies from the 'movies' collection that have complete information and have received more than 1000 votes on IMDb.



The screenshot shows the MongoDB Explorer interface. The filter bar contains the query: `{ "imdb.votes": { "$gt": 1000 } }`. The results section shows two movie documents:

```
{
  "_id": "ObjectId('6908b34c43bc21c7ceffc46')",
  "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('6908b34c43bc21c7ceffc47')",
  "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
}
```



The screenshot shows the MongoDB Explorer interface. The filter bar contains the query: `{ "imdb.rating": { "$gt": 7 } }`. The results section shows three movie documents:

```
{
  "_id": "ObjectId('6908b34c43bc21c7ceffc49')",
  "title": "Modern Love Scene",
  "year": 1921,
  "rated": "PG",
  "runtime": 36,
  "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('6908b34c43bc21c7ceffc4a')",
  "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('6908b34c43bc21c7ceffc4b')",
  "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
}
```

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

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

moviesDB.movies

STORAGE SIZE: 4KB LOGICAL DATA SIZE: 0B TOTAL DOCUMENTS: 0 INDEXES TOTAL SIZE: 4KB

Find Indexes Schema API Patterns Aggregation Search Indexes

Generate queries from natural language in Compass

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

QUERY RESULTS: 1-4 OF 4

```
{
  "_id": ObjectId("6908b34c3bc31c7cfc46"),
  "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("6908b34c3bc31c7cfc49"),
  "title": "Modern Love Scene",
  "year": 1921,
  "rated": "PG",
  "runtime": 98,
  "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("6908b34c3bc31c7cfc4a"),
  "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("6908b34c3bc31c7cfc4b"),
  "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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9. Retrieve all movies from the 'movies' collection that have complete information and have a viewer rating higher than 4 on Tomatoes.

Browser tabs: Sent Mail - sridurgar.2024.aid, Cluster0 Data | Cloud: Mongo, Google Gemini

Address bar: cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find

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

QUERY RESULTS: 1-4 OF 4

Result 1:

```
{
  "_id": ObjectId('698b34c4c3bc21c7cffe47'),
  "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
}
```

Result 2:

```
{
  "_id": ObjectId('698b34c4c3bc21c7cffe49'),
  "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
}
```

Result 3:

```
{
  "_id": ObjectId('698b34c4c3bc21c7cffe4a'),
  "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
}
```

Result 4:

```
{
  "_id": ObjectId('698b34c4c3bc21c7cffe4b'),
  "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
}
```

Footer: Privacy Atlas Blog Contact Sales

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

Cluster0 Data | Cloud: MongoD | Sent Mail - sridurgar.2024.aid | Google Gemini

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

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

QUERY RESULTS: 1-4 OF 4

```
{
  "_id": ObjectId('6908b34c4c3bc21c7ceffc46'),
  "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('6908b34c4c3bc21c7ceffc49'),
  "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
}
```

```
{
  "_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
}
```

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.

Browser tabs: Sent Mail - sridurgar.2024.aid: Cluster0 Data | Cloud: MongoD Google Gemini

URL: cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find

Left sidebar: Create Database, Search Namespaces, moviesDB, movies, sample_mflix, testtab

moviesDB.movies

STORAGE SIZE: 4KB LOGICAL DATA SIZE: 0B TOTAL DOCUMENTS: 0 INDEXES TOTAL SIZE: 4KB

Find Indexes Schema Anti-Patterns Aggregation Search Indexes

Generate queries from natural language in Compass

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

Project: { "directors": 1, "writers": 1, "awards": 1, "year": 1, "genres": 1, "runtime": 1, "cast": 1, "countries": 1, "_id": 0 }

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

Collation: { locale: 'simple' }

QUERY RESULTS: 1-4 OF 4

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

System Status: All Good
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Browser tabs: Sent Mail - sridurgar.2024.aid: Cluster0 Data | Cloud: MongoD Google Gemini

URL: cloud.mongodb.com/v2/688efc90d3eb2567123e4661#/metrics/replicaSet/69087dd47b9426505d00cdc3/explorer/moviesDB/movies/find

Left sidebar: Create Database, Search Namespaces, moviesDB, movies, sample_mflix, testtab

moviesDB.movies

STORAGE SIZE: 4KB LOGICAL DATA SIZE: 0B TOTAL DOCUMENTS: 0 INDEXES TOTAL SIZE: 4KB

Find Indexes Schema Anti-Patterns Aggregation Search Indexes

Generate queries from natural language in Compass

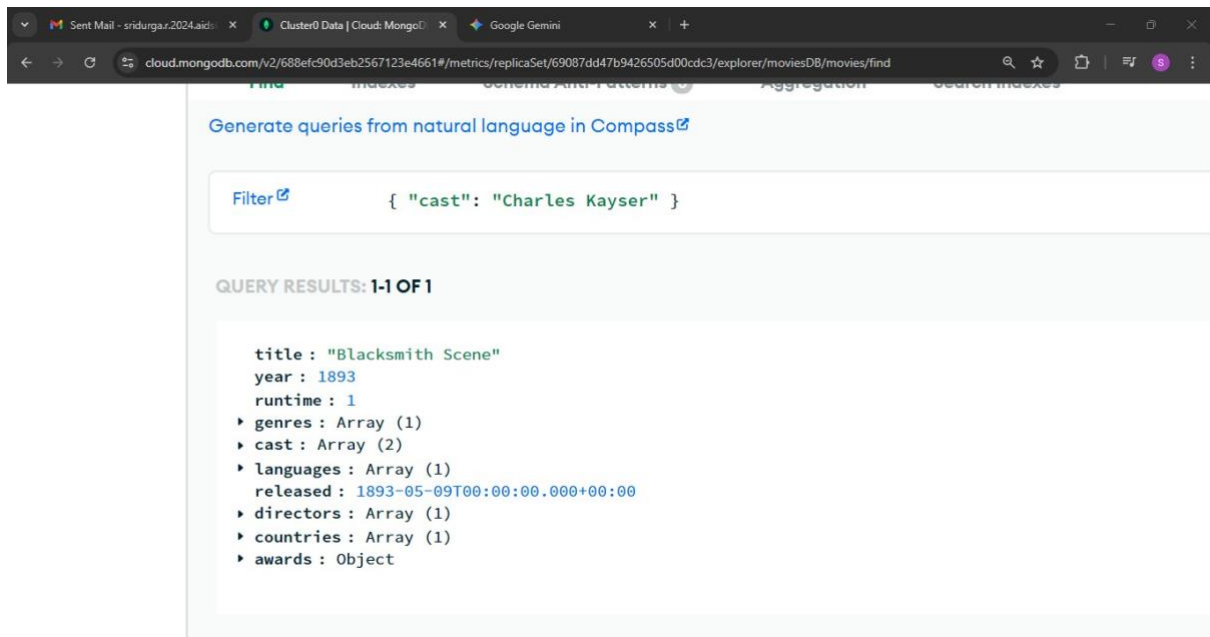
Filter: { "awards.nominations": { "\$gt": 0 } }

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

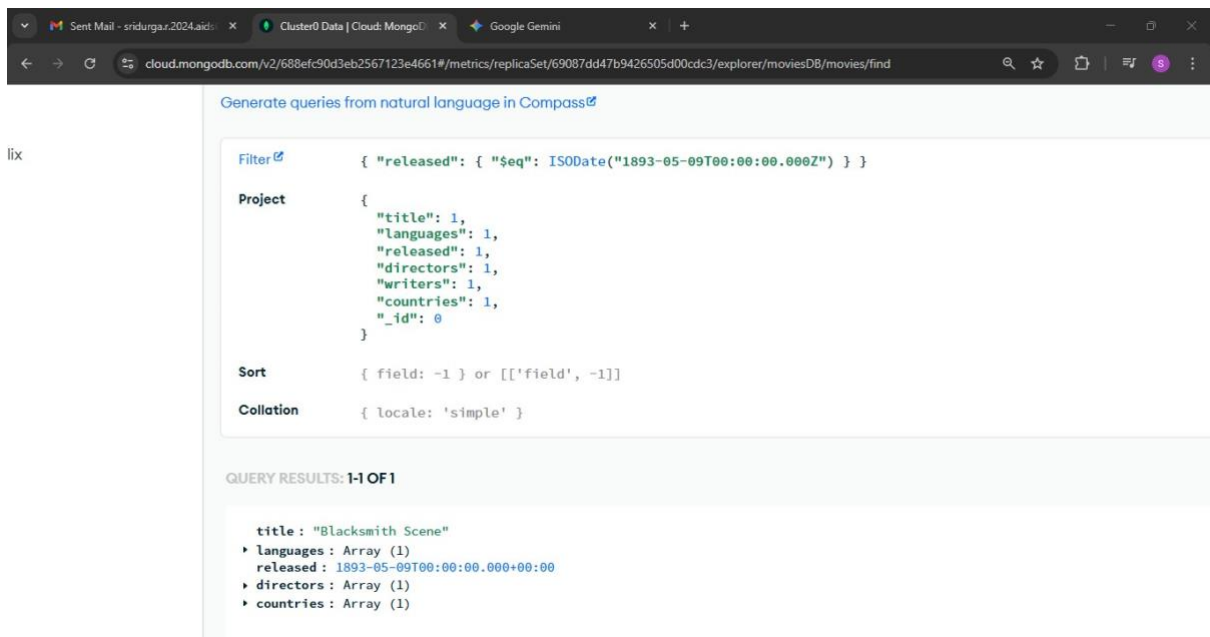
title: "The Secret Scene"
year: 2020
runtime: 123
genres: Array (2)
cast: Array (2)
languages: Array (1)
released: 2020-09-15T00:00:00+00:00
directors: Array (1)
countries: Array (1)
awards: object

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".



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



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.

Cluster0 Data | Cloud: MongoD

Google Gemini

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

movies

mple_mflix

stdb

Generate queries from natural language in Compass

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]]

Collation

{ 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)

n Status: All Good

Cluster0 Data | Cloud: MongoD

Google Gemini

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

movies

mple_mflix

stdb

Generate queries from natural language in Compass

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]]

Collation

{ 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)

n Status: All Good