

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from this bar, containing the date.

5-6-2022

# Practica 2

MongoDB

Several thin, curved lines in dark blue and light grey originate from the bottom left corner and sweep upwards and to the right.

Fernando Revilla Maqueda

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## Parámetros de Conexión

Para MongoCompas:

mongodb+srv://FRM00:<password>@clusterfrm.6e8ku.mongodb.net/test

Contraseña: root

Para MongoAtlas:

[782891@unizar.es](mailto:782891@unizar.es)

Contraseña: 31052000

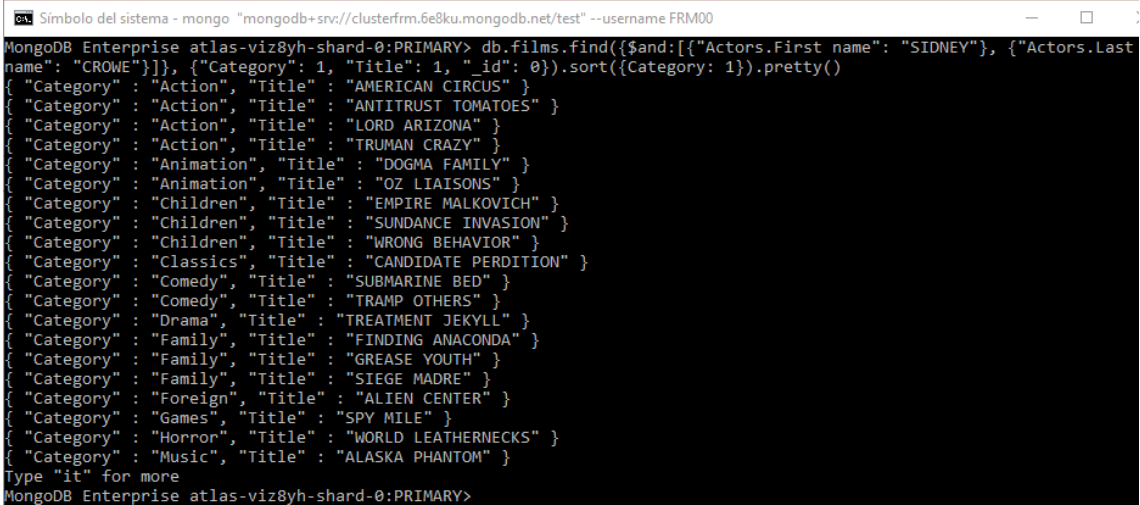
Para conectarse desde Shell:

mongo "mongodb+srv://clusterfrm.6e8ku.mongodb.net/myFirstDatabase" --username FRM00

Contraseña: root

## Consulta 1

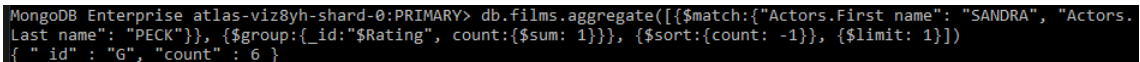
```
db.films.find({$and:[{"Actors.First name": "SIDNEY"}, {"Actors.Last name": "CROWE"}]}, {"Category": 1, "Title": 1, "_id": 0}).sort({Category: 1}).pretty()
```



```
Símbolo del sistema - mongo "mongodb+srv://clusterfrm.6e8ku.mongodb.net/test" --username FRM00
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.films.find({$and:[{"Actors.First name": "SIDNEY"}, {"Actors.Last name": "CROWE"}]}, {"Category": 1, "Title": 1, "_id": 0}).sort({Category: 1}).pretty()
{ "Category" : "Action", "Title" : "AMERICAN CIRCUS" }
{ "Category" : "Action", "Title" : "ANTITRUST TOMATOES" }
{ "Category" : "Action", "Title" : "LORD ARIZONA" }
{ "Category" : "Action", "Title" : "TRUMAN CRAZY" }
{ "Category" : "Animation", "Title" : "DOGMA FAMILY" }
{ "Category" : "Animation", "Title" : "OZ LIAISONS" }
{ "Category" : "Children", "Title" : "EMPIRE MALKOVICH" }
{ "Category" : "Children", "Title" : "SUNDANCE INVASION" }
{ "Category" : "Children", "Title" : "WRONG BEHAVIOR" }
{ "Category" : "Classics", "Title" : "CANDIDATE PERDITION" }
{ "Category" : "Comedy", "Title" : "SUBMARINE BED" }
{ "Category" : "Comedy", "Title" : "TRAMP OTHERS" }
{ "Category" : "Drama", "Title" : "TREATMENT JEKVL" }
{ "Category" : "Family", "Title" : "FINDING ANACONDA" }
{ "Category" : "Family", "Title" : "GREASE YOUTH" }
{ "Category" : "Family", "Title" : "SIEGE MADRE" }
{ "Category" : "Foreign", "Title" : "ALIEN CENTER" }
{ "Category" : "Games", "Title" : "SPY MILE" }
{ "Category" : "Horror", "Title" : "WORLD LEATHERNECKS" }
{ "Category" : "Music", "Title" : "ALASKA PHANTOM" }
Type "it" for more
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY>
```

## Consulta 2

```
db.films.aggregate([{$match:{"Actors.First name": "SANDRA", "Actors.Last name": "PECK"}}, {$group:{"_id":"$Rating", count:{$sum: 1}}}, {$sort:{count: -1}}, {$limit: 1}])
```



```
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.films.aggregate([{$match:{"Actors.First name": "SANDRA", "Actors.Last name": "PECK"}}, {$group:{"_id":"$Rating", count:{$sum: 1}}}, {$sort:{count: -1}}, {$limit: 1}])
{ "_id" : "G", "count" : 6 }
```

## Consulta 3

```
db.customers.aggregate([{$lookup:{from: "films",localField:"Rentals.filmId",foreignField:"_id",
as: "aux"}},{ $match:{"First Name": "WENDY","Last Name": "HARRISON"}},{ $project:{
"_id":0,"First Name":1, "Last Name":1,"aux.Title":1,"aux.Category":1,"
aux.Length":1}}]).pretty()
```

```
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.customers.aggregate([{$lookup:{from: "films",localField:"Rentals.
filmId",foreignField:"_id", as: "aux"}},{ $match:{"First Name": "WENDY","Last Name": "HARRISON"}},{ $project:{ "_id":0,
"First Name":1, "Last Name":1,"aux.Title":1,"aux.Category":1," aux.Length":1}}]).pretty()
{
  "First Name" : "WENDY",
  "Last Name" : "HARRISON",
  "aux" : [
    {
      "Category" : "Music",
      "Title" : "ALASKA PHANTOM"
    },
    {
      "Category" : "Drama",
      "Title" : "BEAUTY GREASE"
    },
    {
      "Category" : "Sports",
      "Title" : "CHANCE RESURRECTION"
    },
    {
      "Category" : "Children",
      "Title" : "CLOCKWORK PARADISE"
    },
    {
      "Category" : "Children",
      "Title" : "CROOKED FROGMEN"
    },
    {
      "Category" : "Travel",
      "Title" : "DISCIPLE MOTHER"
    },
    {
      "Category" : "Classics",
      "Title" : "DRACULA CRYSTAL"
    },
    {
      "Category" : "Games",
      "Title" : "GUN BONNIE"
    },
    {
      "Category" : "Music",
      "Title" : "HANOVER GALAXY"
    },
    {
      "Category" : "Games",
      "Title" : "HAUNTING PIANIST"
    },
    {
      "Category" : "Foreign",
      "Title" : "HELLFIGHTERS SIERRA"
    },
    {
      "Category" : "Classics",
      "Title" : "HYDE DOCTOR"
    },
    {
      "Category" : "Foreign",
      "Title" : "JET NEIGHBORS"
    },
    {
      "Category" : "Classics",
      "Title" : "LEAGUE HELLFIGHTERS"
    }
  ]
}
```

## Consulta 4

```
db.films.aggregate([{$match:{"Category":"Music"}},{ $lookup:{from:
"customers",localField:"_id",foreignField:"Rentals.filmId",as: "aux"}},{ $project:{"_id":0,"Title":
1,"Total_Peliculas":{ $size : "$aux.Rentals"}}},{ $sort:{"Total_Peliculas":-1}},{ $limit:8}]).pretty()
```

```
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.films.aggregate([{$match:{"Category":"Music"}},{ $lookup:{from: "c
ustomers",localField:"_id",foreignField:"Rentals.filmId",as: "aux"}},{ $project:{"_id":0,"Title": 1,"Total_Peliculas":
{ $size : "$aux.Rentals"}}},{ $sort:{"Total_Peliculas":-1}},{ $limit:8}]).pretty()
{ "Title" : "SCALAWAG DUCK", "Total_Peliculas" : 32 }
{ "Title" : "CONFIDENTIAL INTERVIEW", "Total_Peliculas" : 29 }
{ "Title" : "ENEMY ODDS", "Total_Peliculas" : 29 }
{ "Title" : "GREATEST NORTH", "Total_Peliculas" : 29 }
{ "Title" : "BOOGIE AMELIE", "Total_Peliculas" : 28 }
{ "Title" : "TELEGRAPH VOYAGE", "Total_Peliculas" : 27 }
{ "Title" : "DORADO NOTTING", "Total_Peliculas" : 27 }
{ "Title" : "DEER VIRGINIAN", "Total_Peliculas" : 27 }
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY>
```

## Consulta 5

```
db.createView("Consulta5", "films", [{$match:{"Category":"Music"}},{ $lookup:{from:
"customers",localField:"_id",foreignField:"Rentals.filmId",as:
"aux"}},{ $project:{"Title":1,"Category":1,"aux.First Name":1,"aux.Last Name":1}},])
```

```
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.createView("Consulta5", "films", [{$match:{"Category":"Music"}},{ $
lookup:{from: "customers",localField:"_id",foreignField:"Rentals.filmId",as: "aux"}},{ $project:{"Title":1,"Category":
1,"aux.First Name":1,"aux.Last Name":1}},])
{
  "ok" : 1,
  "$clusterTime" : {
    "clusterTime" : Timestamp(1654190240, 1),
    "signature" : {
      "hash" : BinData(0,"khdGlqhJIU7WloXsvvdh0hSqEd0="),
      "keyId" : NumberLong("7070882647420960773")
    }
  },
  "operationTime" : Timestamp(1654190240, 1)
}
```

## Documents

## Aggregations

## Schema

## Explain Plan

## Indexes

## Validation

FILTER { field: 'value' }

OPTIONS

FIND

RESET



VIEW



Displaying documents 1 - 20 of 51



RE

```
_id: 12
Category: "Music"
Title: "ALASKA PHANTOM"
> aux: Array
```

```
_id: 17
Category: "Music"
Title: "ALONE TRIP"
> aux: Array
```

```
_id: 20
Category: "Music"
Title: "AMELIE HELLFIGHTERS"
> aux: Array
```

```
_id: 51
Category: "Music"
Title: "BALLOON HOMEWARD"
> aux: Array
```

```
_id: 54
Category: "Music"
Title: "BANGER PINOCCHIO"
> aux: Array
```

```
_id: 74
Category: "Music"
Title: "BIRCH ANTITRUST"
> aux: Array
```

## Pregunta 7

```
db.notas_corte_unizar.aggregate([{$addFields:{NOTA_ENTERO_JULIO: {$toDecimal:
"$NOTA_CORTE_DEFINITIVA_JULIO"}}}]).pretty()
```

```
MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.notas_corte_unizar.aggregate([{$addFields:{NOTA_ENTERO_JULIO:
{$toDecimal: "$NOTA_CORTE_DEFINITIVA_JULIO"}}}]).pretty()
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c8f"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Ciencias Ambientales",
  "LOCALIDAD" : "Huesca",
  "CENTRO" : "Escuela Politécnica Superior",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "5.000",
  "NOTA_CORTE_DEFINITIVA_SEPTIEMBRE" : "5.000",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_JULIO" : NumberDecimal("5.000")
}
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c90"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Zaragoza",
  "CENTRO" : "Facultad de Ciencias de la Salud",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.766",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_JULIO" : NumberDecimal("11.766")
}
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c91"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Huesca",
  "CENTRO" : "Escuela Universitaria de Enfermería San Jorge de Huesca",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.154",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_JULIO" : NumberDecimal("11.154")
}
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c92"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Teruel",
  "CENTRO" : "Escuela Universitaria de Enfermería de Teruel",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.156",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_JULIO" : NumberDecimal("11.156")
}
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c93"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Bellas Artes",
  "LOCALIDAD" : "Teruel",
  "CENTRO" : "Facultad de Ciencias Sociales y Humanas de Teruel",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "5.000",
  "NOTA_CORTE_DEFINITIVA_SEPTIEMBRE" : "5.000",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_JULIO" : NumberDecimal("5.000")
}
```

```
db.notas_corte_unizar.aggregate([{$addFields:{NOTA_ENTERO_SEPTIEMBRE: {$toDecimal:
"$NOTA_CORTE_DEFINITIVA_SEPTIEMBRE"}}}]).pretty()
```

```

MongoDB Enterprise atlas-viz8yh-shard-0:PRIMARY> db.notas_corte_unizar.aggregate([{$addFields:{NOTA_ENTERO_SEPTIEMBRE
: {$toDecimal: "$NOTA_CORTE_DEFINITIVA_SEPTIEMBRE"}}}]).pretty()
{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c8f"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Ciencias Ambientales",
  "LOCALIDAD" : "Huesca",
  "CENTRO" : "Escuela Politécnica Superior",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "5.000",
  "NOTA_CORTE_DEFINITIVA_SEPTIEMBRE" : "5.000",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_SEPTIEMBRE" : NumberDecimal("5.000")
}

{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c90"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Zaragoza",
  "CENTRO" : "Facultad de Ciencias de la Salud",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.766",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_SEPTIEMBRE" : null
}

{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c91"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Huesca",
  "CENTRO" : "Escuela Universitaria de Enfermería San Jorge de Huesca",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.154",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_SEPTIEMBRE" : null
}

{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c92"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Enfermería",
  "LOCALIDAD" : "Teruel",
  "CENTRO" : "Escuela Universitaria de Enfermería de Teruel",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "11.156",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_SEPTIEMBRE" : null
}

{
  "_id" : ObjectId("6299dd2fa1c5e305cff63c93"),
  "CURSO_ACADEMICO" : "2021",
  "ESTUDIO" : "Grado: Bellas Artes",
  "LOCALIDAD" : "Teruel",
  "CENTRO" : "Facultad de Ciencias Sociales y Humanas de Teruel",
  "NOTA_CORTE_DEFINITIVA_JULIO" : "5.000",
  "NOTA_CORTE_DEFINITIVA_SEPTIEMBRE" : "5.000",
  "FECHA_ACTUALIZACION" : "28/05/2022",
  "NOTA_ENTERO_SEPTIEMBRE" : NumberDecimal("5.000")
}

```



## Pregunta 8

```
db.createView("UnionColecciones", "notas_corte_unizar", [{ $lookup: { from: "oferta_unizar",  
localField: "_id", foreignField: "_id", as: "aux" } }, { $project: {  
  "CURSO_ACADEMICO": 1, "ESTUDIO": 1, "LOCALIDAD": 1, "CENTRO": 1, "NOTA_CORTE_DEFINITIV  
A_JULIO": 1, "NOTA_CORTE_DEFINITIVA_SEPTIEMBRE": 1, "FECHA_ACTUALIZACION": 1,  
  "aux.TIPO_CENTRO": 1, "aux.TIPO_ESTUDIO": 1, "aux.PLAZAS_OFERTADAS": 1, "aux.PLAZAS_MAT  
RICULADAS": 1, "aux.PLAZAS_SOLICITADAS": 1, "aux.INDICE_OCUPACION": 1, } } ] }
```