

EJERCICIOS

1. Crear una base de datos llamada cine.

```
test> use cine
switched to db cine
```

2. Insertar los siguientes documentos en una colección llamada películas.

```
cine> db.createCollection("películas")
{ ok: 1 }
```

```
cine> db.películas.find()
[
  {
    _id: ObjectId("6363d0a8feab07040fddb2f1"),
    titulo: 'Fight Club',
    director: 'Chuck Palahniuk',
    anio: 1999,
    actores: [ 'Brad Pitt', 'Edward Norton' ]
  },
  {
    _id: ObjectId("6363d113feab07040fddb2f2"),
    titulo: 'Pulp Fiction',
    director: 'Quentin Tarantino',
    anio: 1994,
    actores: [ 'John Travolta', 'Uma Thurman' ]
  },
  {
    _id: ObjectId("6363d16afeab07040fddb2f3"),
    titulo: 'Inglorious Basterds',
    director: 'Quentin Tarantino',
    anio: 2009,
    actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
  },
  {
    _id: ObjectId("6363d223feab07040fddb2f4"),
    titulo: 'The Hobbit: An Unexpected Journey',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    saga: 'The Hobbit'
  },
  {
    _id: ObjectId("6363d267feab07040fddb2f5"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    director: 'J.R.R. Tolkien',
    anio: 2013,
    saga: 'The Hobbit'
  },
  {
    _id: ObjectId("6363d359feab07040fddb2f6"),
    titulo: 'The Hobbit: The Battle of the Five Armies',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    synopsis: 'Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.'
  },
  {
    _id: ObjectId("6363d399feab07040fddb2f7"),
    titulo: 'Pee Wee Herman's Big Adventure'
  },
  { _id: ObjectId("6363d3a7feab07040fddb2f8"), titulo: 'Avatar' }
]
cine>
```

3. Realizar las siguientes consultas en la colección películas:
 - a. Obtener todos los documentos y mostrar solo el título y año.

```
cine> db.películas.find({}, {"titulo":1, "anio":1, "_id":0})
[
  { titulo: 'Fight Club', anio: 1999 },
  { titulo: 'Pulp Fiction', anio: 1994 },
  { titulo: 'Inglorious Basterds', anio: 2009 },
  { titulo: 'The Hobbit: An Unexpected Journey', anio: 2012 },
  { titulo: 'The Hobbit: The Desolation of Smaug', anio: 2013 },
  { titulo: 'The Hobbit: The Battle of the Five Armies', anio: 2012 },
  { titulo: 'Pee Wee Herman's Big Adventure' },
  { titulo: 'Avatar' }
]
cine>
```

- b. Obtener documentos con director igual a "Quentin Tarantino", mostrar título y actores.

```
cine> db.peliculas.find({"director":"Quentin Tarantino"},{"titulo":1, "actores":1, "_id":0})
[
  {
    titulo: 'Pulp Fiction',
    actores: [ 'John Travolta', 'Uma Thurman' ]
  },
  {
    titulo: 'Inglorious Basterds',
    actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
  }
]
cine>
```

- c. Obtener documentos con actores que incluyan a "Brad Pitt", mostrar título, año y director.

```
cine> db.peliculas.find({"actores":"Brad Pitt"},{"titulo":1, "anio":1, "director":1, "_id":0})
[
  { titulo: 'Fight Club', director: 'Chuck Palahniuk', anio: 1999 },
  {
    titulo: 'Inglorious Basterds',
    director: 'Quentin Tarantino',
    anio: 2009
  }
]
```

- d. Obtener documentos con saga igual a "The Hobbit", mostrar título y sinopsis.

```
cine> db.peliculas.find({"saga":"The Hobbit"},{"titulo":1, "sinopsis":1, "_id":0})
[
  { titulo: 'The Hobbit: An Unexpected Journey' },
  { titulo: 'The Hobbit: The Desolation of Smaug' },
  {
    titulo: 'The Hobbit: The Battle of the Five Armies',
    sinopsis: 'Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.'
  }
]
```

- e. Obtener todas las películas de los 90s, ordenada de más reciente a menos y muestra el título y año.

```
cine> db.peliculas.find({"$and":[{"anio":{"$gte":1990}}, {"anio":{"$lte":1999}}]}, {"titulo":1, "anio":1, "_id":0}).sort({"anio":-1})
[
  { titulo: 'Fight Club', anio: 1999 },
  { titulo: 'Pulp Fiction', anio: 1994 }
]
cine>
```

- f. Obtener las películas estrenadas entre el año 2000 y 2010, ordenadas alfabéticamente por el título y muestra título, director y saga.

```
cine> db.peliculas.find({"$and":[{"anio":{"$gte":2000}}, {"anio":{"$lte":2010}}]}, {"titulo":1, "director":1, "saga":1, "_id":0}).sort({"titulo":1})
[ { titulo: 'Inglorious Basterds', director: 'Quentin Tarantino' } ]
cine>
```

4. Realiza las siguientes actualizaciones

- a. Agregar sinopsis a "The Hobbit: An Unexpected Journey" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."

```
cine> db.peliculas.update({"titulo":"The Hobbit: An Unexpected Journey"},{$set:{'sinopsis':"A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
cine>
```

- b. Agregar sinopsis a "The Hobbit: The Desolation of Smaug" : "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring."

```
cine> db.peliculas.update({"titulo":"The Hobbit: The Desolation of Smaug"},{$set:{'sinopsis':"The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring."}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
cine>
```

- c. Agregar una actor llamado "Samuel L. Jackson" a la película "Pulp Fiction"

```
cine> db.peliculas.updateOne({"titulo":"Pulp Fiction"}, {$push:{'actores':"Samuel L. Jackson"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
cine>
```

5. Realiza los siguientes text search

- a. Encontrar las películas que en la sinopsis contengan la palabra "Bilbo"

```
cine> db.peliculas.find({"sinopsis":/Bilbo/})
[
  {
    _id: ObjectId("6363d223feab07040fbd2f4"),
    titulo: 'The Hobbit: An Unexpected Journey',
    director: 'J.R.R. Tolkein',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug.'
  },
  {
    _id: ObjectId("6363d267feab07040fbd2f5"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    director: 'J.R.R. Tolkein',
    anio: 2013,
    saga: 'The Hobbit',
    sinopsis: 'The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring.'
  },
  {
    _id: ObjectId("6363d359feab07040fbd2f6"),
    titulo: 'The Hobbit: The Battle of the Five Armies',
    director: 'J.R.R. Tolkein',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.'
  }
]
cine>
```

- b. Encontrar las películas que en la sinopsis contengan la palabra "Gandalf"

```
cine> db.peliculas.find({"sinopsis":/Gandalf/})
[
  {
    _id: ObjectId("6363d267feab07040fbd2f5"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    director: 'J.R.R. Tolkien',
    anio: 2013,
    saga: 'The Hobbit',
    sinopsis: 'The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring.'
  }
]
cine>
```

- c. Encontrar las películas que en la sinopsis contengan la palabra "Bilbo" y no la palabra "Gandalf"

```
cine> db.peliculas.find({"and":{"sinopsis":/Bilbo/},{nor":{"sinopsis":/Gandalf/}}})
[
  {
    _id: ObjectId("6363d223feab07040fbd2f4"),
    titulo: 'The Hobbit: An Unexpected Journey',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug.'
  },
  {
    _id: ObjectId("6363d359feab07040fbd2f6"),
    titulo: 'The Hobbit: The Battle of the Five Armies',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.'
  }
]
cine>
```

- d. Encontrar las películas que en la sinopsis contengan la palabra "dwarves" ó "hobbit"

```
cine> db.peliculas.find({"or":{"sinopsis":/dwarves/},{sinopsis":/hobbit/}})
[
  {
    _id: ObjectId("6363d223feab07040fbd2f4"),
    titulo: 'The Hobbit: An Unexpected Journey',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug.'
  },
  {
    _id: ObjectId("6363d267feab07040fbd2f5"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    director: 'J.R.R. Tolkien',
    anio: 2013,
    saga: 'The Hobbit',
    sinopsis: 'The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring.'
  }
]
cine>
```

- e. Encontrar las películas que en la sinopsis contengan la palabra "gold" y "dragon"

```
cine> db.peliculas.find({"and":{"sinopsis":/gold/},{sinopsis":/dragon/}})
[
  {
    _id: ObjectId("6363d223feab07040fbd2f4"),
    titulo: 'The Hobbit: An Unexpected Journey',
    director: 'J.R.R. Tolkien',
    anio: 2012,
    saga: 'The Hobbit',
    sinopsis: 'A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug.'
  }
]
cine>
```

6. Realiza las siguientes eliminaciones

- a. Eliminar la película "Pee Wee Herman's Big Adventure"

```
cine> db.peliculas.deleteOne({"titulo":"Pee Wee Herman's Big Adventure"})
{ acknowledged: true, deletedCount: 1 }
cine>
```

- b. Eliminar la película "Avatar"

```
cine> db.peliculas.deleteOne({"titulo":"Avatar"})
{ acknowledged: true, deletedCount: 1 }
cine>
```