

1.

```
test> use taller
switched to db taller
taller> db.createCollection("peliculas", {
...   validator: {
...     $jsonSchema: {
...       bsonType: "object",
...       required: ["titulo", "año"],
...       properties: {
...         titulo: {
...           bsonType: "string",
...           description: "El título debe de ser una cadena de texto."
...         },
...         año: {
...           bsonType: "int", minimum: 1900, maximum: 2021,
...           description: "El año debe de ser entero y estar entre 1900 y 2021"
...         }
...       }
...     }
...   }
... })
{ ok: 1 }
taller> |
```



2.

```
taller> db.peliculas.insertMany(
...   [
...     {
...       "titulo": "Fight Club",
...       "escritor": "Chuck Palahniuk",
...       "año": 1999,
...       "actores": ["Brad Pitt", "Edward Norton"]
...     },
...     {
...       "titulo": "Pulp Fiction",
...       "escritor": "Quentin Tarantino",
...       "año": 1994,
...       "actores": ["John Travolta", "Uma Thurman"]
...     },
...     {
...       "titulo": "Inglourious Basterds",
...       "escritor": "Quentin Tarantino",
...       "año": 2009,
...       "actores": ["Brad Pitt", "Diane Kruger", "Eli Roth"]
...     },
...     {
...       "titulo": "The Hobbit: An Unexpected Journey",
...       "escritor": "J.R.R. Tolkein",
...       "año": 2012,
...       "franquicia": "The Hobbit",
...     },
...     {
...       "titulo": "The Hobbit: The Desolation of Smaug",
...       "escritor": "J.R.R. Tolkein",
...       "año": 2013,
...       "franquicia": "The Hobbit",
...       "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."
...     },
...     {
...       "titulo": "The Hobbit: The Desolation of Smaug",
...       "escritor": "J.R.R. Tolkein",
...       "año": 2012,
...       "franquicia": "The Hobbit",
...       "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."
...     },
...     {
...       "titulo": "Pee Wee Herman's Big Adventure",
...       "año": 1985,
...     },
...     {
...       "titulo": "Avatar",
...       "año": 2009,
...     }
...   ]
... )
{
  acknowledged: true,
  insertedIds: [
    "0": ObjectId("6232138b2baa6b467976f023"),
    "1": ObjectId("6232138b2baa6b467976f024"),
    "2": ObjectId("6232138b2baa6b467976f025"),
    "3": ObjectId("6232138b2baa6b467976f026"),
    "4": ObjectId("6232138b2baa6b467976f027"),
    "5": ObjectId("6232138b2baa6b467976f028"),
    "6": ObjectId("6232138b2baa6b467976f029"),
    "7": ObjectId("6232138b2baa6b467976f02a")
  ]
}
taller> |
```



BÚSQUEDAS:

1. Obtener todos los documentos:

```
taller> db.peliculas.find().pretty()
[
{
  _id: ObjectId("6232138b2baa6b467976f023"),
  titulo: 'Fight Club',
  escritor: 'Chuck Palahniuk',
  'año' : 1999,
  actores: [ 'Brad Pitt', 'Edward Norton' ]
},
{
  _id: ObjectId("6232138b2baa6b467976f024"),
  titulo: 'Pulp Fiction',
  escritor: 'Quentin Tarantino',
  'año' : 1994,
  actores: [ 'John Travolta', 'Uma Thurman' ]
},
{
  _id: ObjectId("6232138b2baa6b467976f025"),
  titulo: 'Inglourious Basterds',
  escritor: 'Quentin Tarantino',
  'año' : 2009,
  actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
},
{
  _id: ObjectId("6232138b2baa6b467976f026"),
  titulo: 'The Hobbit: An Unexpected Journey',
  escritor: 'J.R.R. Tolkein',
  'año' : 2012,
  franquicia: 'The Hobbit'
},
{
  _id: ObjectId("6232138b2baa6b467976f027"),
  titulo: 'The Hobbit: The Desolation of Smaug',
  escritor: 'J.R.R. Tolkein',
  'año' : 2013,
  franquicia: 'The Hobbit'
},
{
  _id: ObjectId("6232138b2baa6b467976f028"),
  titulo: 'The Hobbit: The Battle of the Five Armies',
  escritor: 'J.R.R. Tolkein',
  'año' : 2014,
  franquicia: 'The Hobbit',
  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("6232138b2baa6b467976f029"),
  titulo: "Pee Wee Herman's Big Adventure",
  'año' : 1985
},
{
  _id: ObjectId("6232138b2baa6b467976f02a"),
  titulo: 'Avatar',
  'año' : 2009
}
]
taller> |
```

2. Obtener todos los documentos con escritor igual a “Quentin Tarantino”:

```
taller> db.peliculas.find({ "escritor": "Quentin Tarantino" }).pretty()
[
{
  _id: ObjectId("6232138b2baa6b467976f024"),
  titulo: 'Pulp Fiction',
  escritor: 'Quentin Tarantino',
  'año': 1994,
  actores: [ 'John Travolta', 'Uma Thurman' ]
},
{
  _id: ObjectId("6232138b2baa6b467976f025"),
  titulo: 'Inglourious Basterds',
  escritor: 'Quentin Tarantino',
  'año': 2009,
  actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
}
]
taller> |
```

3. Obtener todos los documentos con actores que incluyan a “Brad Pitt”:

```
taller> db.peliculas.find({"actores":"Brad Pitt"}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f023"),
    titulo: 'Fight Club',
    escritor: 'Chuck Palahniuk',
    'año': 1999,
    actores: [ 'Brad Pitt', 'Edward Norton' ]
  },
  {
    _id: ObjectId("6232138b2baa6b467976f025"),
    titulo: 'Inglourious Basterds',
    escritor: 'Quentin Tarantino',
    'año': 2009,
    actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
  }
]
taller> |
```

4. Obtener documentos con franquicia igual a “The Hobbit”:

```
taller> db.peliculas.find({"franquicia": "The Hobbit"}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f026"),
    titulo: 'The Hobbit: An Unexpected Journey',
    escritor: 'J.R.R. Tolkein',
    'año': 2012,
    franquicia: 'The Hobbit'
  },
  {
    _id: ObjectId("6232138b2baa6b467976f027"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    escritor: 'J.R.R. Tolkein',
    'año': 2013,
    franquicia: 'The Hobbit'
  },
  {
    _id: ObjectId("6232138b2baa6b467976f028"),
    titulo: 'The Hobbit: The Battle of the Five Armies',
    escritor: 'J.R.R. Tolkein',
    'año': 2014,
    franquicia: 'The Hobbit',
    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.'
  }
]
taller> |
```

5. Obtener todas las películas de los 90's.

```
taller> db.peliculas.find({año: {$gte:1990, $lte:1999}}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f023"),
    titulo: 'Fight Club',
    escritor: 'Chuck Palahniuk',
    'año': 1999,
    actores: [ 'Brad Pitt', 'Edward Norton' ]
  },
  {
    _id: ObjectId("6232138b2baa6b467976f024"),
    titulo: 'Pulp Fiction',
    escritor: 'Quentin Tarantino',
    'año': 1994,
    actores: [ 'John Travolta', 'Uma Thurman' ]
  }
]
taller> |
```

6. Obtener todas las películas estrenadas entre el año 1990 y 2010

```
taller> db.peliculas.find({año: {$gte:1990, $lte:2010}}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f023"),
    titulo: 'Fight Club',
    escritor: 'Chuck Palahniuk',
    'año': 1999,
    actores: [ 'Brad Pitt', 'Edward Norton' ]
  },
  {
    _id: ObjectId("6232138b2baa6b467976f024"),
    titulo: 'Pulp Fiction',
    escritor: 'Quentin Tarantino',
    'año': 1994,
    actores: [ 'John Travolta', 'Uma Thurman' ]
  },
  {
    _id: ObjectId("6232138b2baa6b467976f025"),
    titulo: 'Inglourious Basterds',
    escritor: 'Quentin Tarantino',
    'año': 2009,
    actores: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
  },
  {
    _id: ObjectId("6232138b2baa6b467976f02a"),
    titulo: 'Avatar',
    'año': 2009
  }
]
taller> |
```

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

```
taller> db.peliculas.find({synopsis:/Bilbo/}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f028"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    escritor: 'J.R.R. Tolkein',
    'año': 2013,
    franquicia: 'The Hobbit',
    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.'
  }
]
taller> |
```



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

```
taller> db.peliculas.find({synopsis:/Gandalf/}).pretty()
taller> |
```

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

```
taller> db.peliculas.find({$regex: "Bilbo", $not: /Gandalf/}).pretty()
[
  {
    _id: ObjectId("6232138b2baa6b467976f028"),
    titulo: 'The Hobbit: The Desolation of Smaug',
    escritor: 'J.R.R. Tolkein',
    'año': 2013,
    franquicia: 'The Hobbit',
    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.'
  }
]
taller> |
```



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

```
taller> db.peliculas.find({$or: [{synopsis:/dwarves/i}, {synopsis:/hobbit/i}]}).pretty()
taller> |
```

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

```
taller> db.peliculas.find({$and: [{synopsis:/gold/i}, {synopsis:/dragon/i}]}).pretty()
taller> |
```

ACTUALIZACIONES:

- 1. 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."**

```
taller> db.peliculas.updateOne({titulo: "The Hobbit: An Unexpected Journey"}, {$set:{synopsis:"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."}})  
{  
    acknowledged: true,  
    insertedId: null,  
    matchedCount: 1,  
    modifiedCount: 0,  
    upsertedCount: 0  
}  
taller> |
```



- 2. 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."**

```
taller> db.peliculas.updateOne({titulo: "The Hobbit: The Desolation of Smaug"}, {$set:{synopsis:"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: 0,  
    upsertedCount: 0  
}  
taller> |
```



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

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



ELIMINACIONES:

1. Eliminar la película “Inglorious Basterds”

```
taller> db.peliculas.deleteOne({titulo:"Inglorious Basterds"}  
{ acknowledged: true, deletedCount: 1 }  
taller> |
```

2. Eliminar la película “Avatar”

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