MongoDB

Assignment

Question-1:

MongoDB Exercise in mongo shell Connect to a running mongo instance, use a database named mongo_practice. Document all your queries in a javascript file to use as a reference.

Insert Documents Insert the following documents into a movies collection.

title: Fight Club

writer: Chuck Palahniuko

year: 1999

actors: [Brad Pitt Edward Norton]

title: Pulp Fiction

writer: Quentin Tarantino

year: 1994

actors: [John Travolta Uma Thurman]

title: Inglorious Basterds

writer: Quentin Tarantino

year: 2009

actors: [Brad Pitt Diane Kruger Eli Roth]

title: The Hobbit: An Unexpected Journey

writer: J.R.R. Tolkein

year : 2012

franchise: The Hobbit

title: The Hobbit: The Desolation of Smaug

writer: J.R.R. Tolkein

year : 2013

franchise: The Hobbit

title: The Hobbit: The Battle of the Five Armies writer:

J.R.R. Tolkein

year: 2012

franchise: 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.

title: Pee Wee Herman's Big Adventure

title: Avatar Reference

https://www.tutorialspoint.com/mongodb/mongodb_insert

_document.htm Query / Find Documents query the movies collection to

- 1. get all documents
- 2. get all documents with writer set to "Quentin Tarantino"
- 3. get all documents where actors include "Brad Pitt" 4. get all documents with franchise set to "The Hobbit"
- 5. get all movies released in the 90s
- 6. get all movies released before the year 2000 or after 2010

Solution:

C:\Users\vinnu>mongo "mongodb+srv://cluster0.6vujr.mongodb.net/file" -- username vigneshvinnu03

MongoDB shell version v4.4.3

Enter password:

connecting to: mongodb://cluster0-shard-00-

00.6vujr.mongodb.net:27017,cluster0-shard-00-

01.6vujr.mongodb.net:27017,cluster0-shard-00-

02.6vujr.mongodb.net:27017/file?authSource=admin&compressors=disabled &gssapiServiceName=mongodb&replicaSet=atlas-129li4-shard-0&ssl=true

Implicit session: session { "id" : UUID("a6a5692c-f1bf-4b96-abfb-73f8c3cb59ce") }

MongoDB server version: 4.2.11

WARNING: shell and server versions do not match

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> use mongo_practice
switched to db mongo_practice
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.createCollection('movies')
    "ok": 1,
     "$clusterTime" : {
         "clusterTime": Timestamp(1610642978, 1),
         "signature": {
              "hash": BinData(0,"0h4cpj1f9xhVDLHbaca/9pX0cbE="),
              "keyId": NumberLong("6858480936787378180")
         }
    },
    "operationTime": Timestamp(1610642978, 1)
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.insert([{
"title": "Fight Club", "writer": "Chuck Palahniuko", "year": 1999, "actors":
["Brad Pitt", "Edward Norton"] }, { "title": "Pulp Fiction", "writer":
"Quentin Tarantino", "year": 1994, "actors": [ "John Travolta", "Uma
Thurman" ] }, { "title": "Inglorious Basterds", "writer": "Quentin
Tarantino", "year": 2009, "actors": ["Brad Pitt", "Diane Kruger", "Eli Roth"
] }, { "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R.
Tolkein", "year" : 2012, "franchise" : "The Hobbit" }, {"title" : "The Hobbit:
The Desolation of Smaug", "writer": "J.R.R. Tolkein", "year": 2013,
"franchise": "The Hobbit" }, { "title": "The Hobbit: The Battle of the Five
Armies", "writer": "J.R.R. Tolkein", "year": 2012, "franchise": "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." }, { "title": "Pee Wee Herman's Big
Adventure" }, { "title": "Avatar" } ])
BulkWriteResult({
    "writeErrors":[],
    "writeConcernErrors":[],
    "nInserted": 8,
    "nUpserted": 0,
    "nMatched": 0,
    "nModified": 0,
    "nRemoved": 0,
    "upserted":[]
})
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find().pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    ]
}
```

```
"_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors":[
         "John Travolta",
         "Uma Thurman"
    ]
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
    "title": "Inglorious Basterds",
    "writer": "Quentin Tarantino",
    "year": 2009,
    "actors":[
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
    ]
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
    "title": "The Hobbit: An Unexpected Journey",
    "writer": "J.R.R. Tolkein",
```

```
"year": 2012,
    "franchise": "The Hobbit"
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
    "title": "The Hobbit: The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
     "year": 2013,
    "franchise": "The Hobbit"
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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("600076354b21dd8ed3f8c6a4"),
    "title": "Pee Wee Herman's Big Adventure"
}
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a5"), "title" : "Avatar" }
```

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({writer:"Quentin Tarantino"}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman"
    ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
    "title": "Inglorious Basterds",
    "writer": "Quentin Tarantino",
    "year": 2009,
    "actors" : [
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
    ]
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({actors:"Brad Pitt"}).pretty()
```

```
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors":[
         "Brad Pitt",
         "Edward Norton"
    ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
    "title": "Inglorious Basterds",
    "writer": "Quentin Tarantino",
    "year": 2009,
    "actors" : [
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
    ]
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({franchise:"The Hobbit"}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
```

```
"title": "The Hobbit: An Unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit"
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
     "writer": "J.R.R. Tolkein",
    "year": 2013,
    "franchise": "The Hobbit"
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$and:[{year:{$gt:1990}}},{year:{$lt:2000}}]}).pretty()
{
```

```
"_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    1
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors":[
         "John Travolta",
         "Uma Thurman"
    1
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$or:[{year:{$lt:2000}}},{year:{$gt:2010}}]}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
```

```
"year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman"
    ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
    "title": "The Hobbit: An Unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit"
```

```
"_id": ObjectId("600076354b21dd8ed3f8c6a2"),
    "title": "The Hobbit: The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year": 2013,
    "franchise": "The Hobbit"
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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."
}
```

Screenshots:

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```
C:\Users\vinnu>mongo "mongodb+srv://cluster0.6vujr.mongodb.net/file" --username vigneshvinnu03
Enter password:
connecting to: mongodb://cluster0-shard-00-00.6vujr.mongodb.net:27017,cluster0-shard-00-01.6vujr.mongodb.net:27017,cluster0-shard-00-02.6vujr.mongodb.net:27017/file?aut
hSource=admin&compressors=disabled&gssapiServiceName=mongodb&replicaSet=atlas-129li4-shard-0&ssl=true
Implicit session: session { "id" : UUID("a6a5692c-f1bf-4b96-abfb-73f8c3cb59ce") }
MongoDB server version: 4.2.11
WARNING: shell and server versions do not match
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> use mongo practice
switched to db mongo practice
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.createCollection('movies')
        "$clusterTime" : {
                 "clusterTime" : Timestamp(1610642978, 1),
                 "signature" : {
                          "hash": BinData(0,"0h4cpj1f9xhVDLHbaca/9pX0cbE="),
                          "keyId" : NumberLong("6858480936787378180")
        },
"operationTime" : Timestamp(1610642978, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.insert([{ "title": "Fight Club", "writer": "Chuck Palahniuko", "year": 1999, "actors": [ "Brad Pitt", "E
dward Norton" ] }, { "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John Travolta", "Uma Thurman" ] }, { "title" : "Inglorious B
asterds", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }, { "title" : "The Hobbit: Án Únexpected Journey", "wri
ter" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }, {"title" : "The Hobbit: The Desolation of Smaug", "writer" : " J.R.R. Tolkein", "year" : 2013, "fr
anchise" : "The Hobbit" }, { "title" : "The Hobbit: The Battle of the Five Armies", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "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." }, {
title" : "Pee Wee Herman's Big Adventure" }, { "title" : "Avatar" } ])
BulkWriteResult({
        "writeErrors" : [ ],
        "writeConcernErrors" : [ ],
        "nInserted" : 8,
        "nUpserted" : 0,
        "nMatched" : 0,
        "nModified": 0,
        "nRemoved" : 0,
        "upserted" : [ ]
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
        " id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
```

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```
"nModified" : 0,
        "nRemoved" : 0,
        "upserted" : [ ]
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
        __id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
"writer" : "Chuck Palahniuko",
        "year" : 1999,
        "actors" : [
                 "Brad Pitt",
                 "Edward Norton"
        "_id" : ObjectId("600076354b21dd8ed3f8c69f"),
        "title" : "Pulp Fiction",
        "writer" : "Quentin Tarantino",
        "year" : 1994,
        "actors" : [
                 "John Travolta",
                 "Uma Thurman"
        "_id" : ObjectId("600076354b21dd8ed3f8c6a0"),
        "title" : "Inglorious Basterds",
        "writer" : "Quentin Tarantino",
"year" : 2009,
        "actors" : [
                 "Brad Pitt",
                 "Diane Kruger",
                 "Eli Roth"
        "_id" : ObjectId("600076354b21dd8ed3f8c6a1"),
"title" : "The Hobbit: An Unexpected Journey",
        "writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise" : "The Hobbit"
```

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```
"writer" : "J.R.R. Tolkein",
      "year" : 2012,
      "franchise" : "The Hobbit"
      " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
      "title": "The Hobbit: The Desolation of Smaug",
      "writer": " J.R.R. Tolkein",
      "year" : 2013,
      "franchise" : "The Hobbit"
      " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
      "title" : "The Hobbit: The Battle of the Five Armies",
      "writer" : "J.R.R. Tolkein",
      "year" : 2012,
      "franchise" : "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 risin
darkness."
      "_id" : ObjectId("600076354b21dd8ed3f8c6a4"),
      "title" : "Pee Wee Herman's Big Adventure"
ongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({writer:"Quentin Tarantino"}).pretty()
      " id" : ObjectId("600076354b21dd8ed3f8c69f"),
      "title" : "Pulp Fiction",
      "writer" : "Quentin Tarantino",
      "year" : 1994,
      "actors" : [
             "John Travolta",
             "Uma Thurman"
      " id" : ObjectId("600076354b21dd8ed3f8c6a0"),
      "title" : "Inglorious Basterds",
      "writer" : "Quentin Tarantino",
      "year" : 2009,
      "actors" : [
             "Brad Pitt",
             "Diane Kruger",
```

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```
"writer" : "Quentin Tarantino",
        "year" : 2009,
        "actors" : [
               "Brad Pitt",
               "Diane Kruger",
               "Eli Roth"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({actors:"Brad Pitt"}).pretty()
       "_id" : ObjectId("600076354b21dd8ed3f8c69e"),
       "title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999,
       "actors" : [
               "Brad Pitt",
               "Edward Norton"
       "_id" : ObjectId("600076354b21dd8ed3f8c6a0"),
       "title" : "Inglorious Basterds",
       "writer" : "Quentin Tarantino",
       "year" : 2009,
       "actors" : [
               "Brad Pitt",
               "Diane Kruger",
               "Eli Roth"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({franchise:"The Hobbit"}).pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c6a1"),
       "title" : "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "The Hobbit"
       "_id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit"
```

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```
"year" : 2013,
        "franchise" : "The Hobbit
       __id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "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 risin
 darkness."
.
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.find({$and:[{year:{$gt:1990}},{year:{$lt:2000}}]}).pretty()
       "_id" : ObjectId("600076354b21dd8ed3f8c69e"),
       "title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999,
        "actors" : [
               "Brad Pitt",
               "Edward Norton"
       "_id" : ObjectId("600076354b21dd8ed3f8c69f"),
       "title" : "Pulp Fiction",
       "writer" : "Quentin Tarantino",
       "year" : 1994,
       "actors" : [
               "John Travolta",
               "Uma Thurman"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find(($or:[{year:{$lt:2000}},{year:{$gt:2010}}])).pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c69e"),
       "title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999,
       "actors" : [
               "Brad Pitt",
               "Edward Norton"
```

```
"actors" : [
                 "Brad Pitt",
                 "Edward Norton"
        "_id" : ObjectId("600076354b21dd8ed3f8c69f"),
"title" : "Pulp Fiction",
        "writer" : "Quentin Tarantino",
        "year" : 1994,
        "actors" : [
                 "John Travolta",
                 "Uma Thurman"
.
| MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.find({$or:[{year:{$1t:2000}},{year:{$gt:2010}}]}).pretty
        "_id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
"writer" : "Chuck Palahniuko",
        "year" : 1999,
        "actors" : [
"Brad Pitt",
                 "Edward Norton"
        "_id" : ObjectId("600076354b21dd8ed3f8c69f"),
        "title" : "Pulp Fiction",
"writer" : "Quentin Tarantino",
        "year" : 1994,
        "actors" : [
"John Travolta",
                 "Uma Thurman"
        __id" : ObjectId("600076354b21dd8ed3f8c6a1"),
        "title" : "The Hobbit: An Unexpected Journey",
        "writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise" : "The Hobbit"
```

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```
"writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise" : "The Hobbit"
        " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
        "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
        "year" : 2013,
        "franchise" : "The Hobbit"
        " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
        "writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise": "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 risin
 darkness."
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("60001e7e99257abf0f731a13")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug." }})
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("60001e7e99257abf0f731a13")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets 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." }})
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("600076354b21dd&ed3f&c6a1")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets 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." }})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
        " id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
        "writer" : "Chuck Palahniuko",
        "year" : 1999,
        "actors" : [
                "Brad Pitt",
                "Edward Norton"
        " id" : ObjectId("600076354b21dd8ed3f8c69f"),
       "title" : "Pulp Fiction",
       "writer" : "Ouentin Tarantino",
```

Question-2:

Update Documents

- 1. add a synopsis to "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."
- 2. add a synopsis to "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."
- 3. add an actor named "Samuel L. Jackson" to the movie "Pulp Fiction" Text Search
- 1. find all movies that have a synopsis that contains the word "Bilbo"
- 2. find all movies that have a synopsis that contains the word "Gandalf"
- 3. find all movies that have a synopsis that contains the word "Bilbo" and not the word "Gandalf"
- 4. find all movies that have a synopsis that contains the word "dwarves" or "hobbit"
- 5. find all movies that have a synopsis that contains the word "gold" and "dragon"
- 1. delete the movie "Pee Wee Herman's Big Adventure"
- 2. delete the movie "Avatar"

Solution:

MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.update({"_id":

ObjectId("600076354b21dd8ed3f8c6a1")},{\$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." }})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find().pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
     "title": "Fight Club",
     "writer": "Chuck Palahniuko",
     "year": 1999,
     "actors" : [
         "Brad Pitt",
         "Edward Norton"
    1
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
     "title": "Pulp Fiction",
     "writer": "Quentin Tarantino",
     "year": 1994,
     "actors" : [
         "John Travolta",
         "Uma Thurman"
     ]
}
```

```
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
     "title": "Inglorious Basterds",
     "writer": "Quentin Tarantino",
     "year": 2009,
     "actors":[
          "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
     1
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "The Hobbit",
     "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."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
     "writer": "J.R.R. Tolkein",
```

```
"year": 2013,
    "franchise": "The Hobbit"
}
    " id": ObjectId("600076354b21dd8ed3f8c6a3"),
     "title": "The Hobbit: The Battle of the Five Armies",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "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("600076354b21dd8ed3f8c6a4"),
    "title": "Pee Wee Herman's Big Adventure"
}
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a5"), "title" : "Avatar" }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.update({"_id":
ObjectId("600076354b21dd8ed3f8c6a2")},{$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 mysterious and magical ring."}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find().pretty()
```

```
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors":[
         "Brad Pitt",
         "Edward Norton"
    ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman"
    ]
}
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    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
    "title": "Inglorious Basterds",
    "writer": "Quentin Tarantino",
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"year": 2009,
     "actors" : [
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
    1
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "The Hobbit",
     "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."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
     "writer": "J.R.R. Tolkein",
     "year": 2013,
     "franchise": "The Hobbit",
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```
"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 mysterious and magical ring."
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
     "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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("600076354b21dd8ed3f8c6a4"),
    "title": "Pee Wee Herman's Big Adventure"
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a5"), "title" : "Avatar" }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.update({"_id":
ObjectId("600076354b21dd8ed3f8c69f")},{$push:{actors:"Samuel L.
Jackson \})"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.update({"_id":
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ObjectId("600076354b21dd8ed3f8c69f")},{$push:{actors:"Samuel L.
Jackson"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find().pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    1
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman",
         "Samuel L. Jackson"
    ]
```

```
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
     "title": "Inglorious Basterds",
     "writer": "Quentin Tarantino",
     "year": 2009,
     "actors" : [
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
     ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "The Hobbit",
     "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."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
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"writer": "J.R.R. Tolkein",
    "year": 2013,
    "franchise": "The Hobbit",
     "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 mysterious and magical ring."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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("600076354b21dd8ed3f8c6a4"),
    "title": "Pee Wee Herman's Big Adventure"
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a5"), "title" : "Avatar" }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.createIndex({synopsis:"text"})
{
    "createdCollectionAutomatically": false,
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"numIndexesBefore": 1,
    "numIndexesAfter": 2,
    "ok": 1,
    "$clusterTime": {
         "clusterTime" : Timestamp(1610643703, 2),
         "signature" : {
              "hash": BinData(0, "f/aj8Gi3RU/7QCNAZ3XDgErco9Y="),
              "keyId": NumberLong("6858480936787378180")
         }
    },
    "operationTime": Timestamp(1610643703, 2)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$text:{$search:"Bilbo"}}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
    "title": "The Hobbit: The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year": 2013,
    "franchise": "The Hobbit",
    "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 mysterious and magical ring."
}
```

```
"_id": ObjectId("600076354b21dd8ed3f8c6a3"),
    "title": "The Hobbit: The Battle of the Five Armies",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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("600076354b21dd8ed3f8c6a1"),
    "title": "The Hobbit: An Unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit",
    "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."
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$text:{$search:"Gandalf"}}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year": 2013,
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```
"franchise": "The Hobbit",
     "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 mysterious and magical ring."
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$and:[{synopsis:{$regex:"Bilbo"}},{synopsis:{$not:/Ganda
lf/}}]})
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a1"), "title" : "The Hobbit: An
Unexpected Journey", "writer": "J.R.R. Tolkein", "year": 2012, "franchise":
"The Hobbit", "synopsis": "A reluctant hobbit, Bilbo Baggins, sets out to the
Lonely Mountain with a spirited group of dwarves to reclaim their mountain
home - and the gold within it - from the dragon Smaug." }
{ "_id" : ObjectId("600076354b21dd8ed3f8c6a3"), "title" : "The Hobbit: The
Battle of the Five Armies", "writer": "J.R.R. Tolkein", "year": 2012,
"franchise": "The Hobbit", "synopsis": "Bilbo and Company are forced to
engage in a war against an array of combatants and keep the Lonely
Mountain from falling into the hands of a rising darkness." }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$and:[{synopsis:{$regex:"Bilbo"}},{synopsis:{$not:/Ganda
lf/}}]}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit",
```

```
"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."
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
     "title": "The Hobbit: The Battle of the Five Armies",
     "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "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."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$or:[{synopsis:{$regex:"dwarves"}},{synopsis:{$regex:"ho
bbit"}}]}).pretty()
{
    " id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit",
     "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."
}
```

```
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
    "title": "The Hobbit: The Desolation of Smaug",
     "writer": "J.R.R. Tolkein",
     "year": 2013,
     "franchise": "The Hobbit",
     "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 mysterious and magical ring."
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find({$and:[{synopsis:{$regex:"gold"}},{synopsis:{$regex:"drag
on"}}]}).pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
    "title": "The Hobbit: An Unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year": 2012,
    "franchise": "The Hobbit",
    "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."
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.remove({"_id" : ObjectId("600076354b21dd8ed3f8c6a4")})
WriteResult({ "nRemoved" : 1 })
```

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.remove({"_id" : ObjectId("600076354b21dd8ed3f8c6a5")})
WriteResult({ "nRemoved" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.movies.find().pretty()
{
    "_id": ObjectId("600076354b21dd8ed3f8c69e"),
    "title": "Fight Club",
    "writer": "Chuck Palahniuko",
    "year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    1
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c69f"),
    "title": "Pulp Fiction",
    "writer": "Quentin Tarantino",
    "year": 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman",
         "Samuel L. Jackson"
    ]
```

```
}
{
    "_id": ObjectId("600076354b21dd8ed3f8c6a0"),
     "title": "Inglorious Basterds",
     "writer": "Quentin Tarantino",
     "year": 2009,
     "actors" : [
         "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
     ]
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a1"),
     "title": "The Hobbit: An Unexpected Journey",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "The Hobbit",
     "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."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a2"),
     "title": "The Hobbit: The Desolation of Smaug",
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```
"writer": "J.R.R. Tolkein",
     "year": 2013,
     "franchise": "The Hobbit",
     "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 mysterious and magical ring."
}
    "_id": ObjectId("600076354b21dd8ed3f8c6a3"),
     "title": "The Hobbit: The Battle of the Five Armies",
     "writer": "J.R.R. Tolkein",
     "year": 2012,
     "franchise": "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."
```

Screenshots:

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"writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise" : "The Hobbit"
        " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
        "title": "The Hobbit: The Desolation of Smaug",
        "writer" : " J.R.R. Tolkein",
        "year" : 2013,
        "franchise": "The Hobbit"
        " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
        "title": "The Hobbit: The Battle of the Five Armies",
        "writer" : "J.R.R. Tolkein",
        "year" : 2012,
        "franchise" : "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 risin
 darkness."
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("60001e7e99257abf0f731a13")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug." }})
WriteResult({    "nMatched" : 0,    "nUpserted" : 0,    "nModified" : 0    })
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.update({" id" : ObjectId("60001e7e99257abf0f731a13")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets 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." }})
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("600076354b21dd8ed3f8c6a1")},{$set:{"synopsis":"A reluctant hobbit, Bilbo Baggins, s
ets 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." }})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
        "_id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
        "writer" : "Chuck Palahniuko",
        "year" : 1999,
        "actors" : [
                "Brad Pitt",
                "Edward Norton"
        " id" : ObjectId("600076354b21dd8ed3f8c69f"),
       "title" : "Pulp Fiction",
        "writer" : "Quentin Tarantino",
```

```
"title" : "Pulp Fiction",
       "writer" : "Quentin Tarantino",
       "year" : 1994,
       "actors" : [
               "John Travolta",
               "Uma Thurman"
       " id" : ObjectId("600076354b21dd8ed3f8c6a0"),
       "title" : "Inglorious Basterds",
       "writer" : "Quentin Tarantino",
       "year" : 2009,
       "actors" : [
               "Brad Pitt",
               "Diane Kruger",
               "Eli Roth"
       " id" : ObjectId("600076354b21dd8ed3f8c6a1"),
       "title": "The Hobbit: An Unexpected Journey",
       "writer": "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "The Hobbit",
       "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."
       "_id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit"
       "_id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title": "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "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 risin
 darkness."
```

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g darkness."
       " id" : ObjectId("600076354b21dd8ed3f8c6a4"),
       "title" : "Pee Wee Herman's Big Adventure"
 __id" : ObjectId("600076354b21dd8ed3f8c6a5"), "title" : "Avatar" }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("600076354b21dd8ed3f8c6a2")},{$set:{"synopsis": "The dwarves, along with Bilbo Baggi
ns and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of mysterious and magical ring."}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c69e"),
       "title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999,
       "actors" : [
               "Brad Pitt",
               "Edward Norton"
       " id" : ObjectId("600076354b21dd8ed3f8c69f"),
       "title" : "Pulp Fiction",
       "writer" : "Quentin Tarantino",
       "year" : 1994,
       "actors" : [
               "John Travolta",
               "Uma Thurman"
       " id" : ObjectId("600076354b21dd8ed3f8c6a0"),
       "title" : "Inglorious Basterds",
       "writer" : "Quentin Tarantino",
       "year" : 2009,
       "actors" : [
               "Brad Pitt",
               "Diane Kruger",
               "Eli Roth"
       " id" : ObjectId("600076354b21dd8ed3f8c6a1")
```

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id" : ObjectId("600076354b21dd8ed3f8c6a1")
       "title": "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "The Hobbit",
       "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."
       " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit",
       "synopsis": "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
       "id": ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "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 risin
 darkness."
       " id" : ObjectId("600076354b21dd8ed3f8c6a4"),
       "title" : "Pee Wee Herman's Big Adventure"
  |ongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("600076354b21dd8ed3f8c69f")},{$push:{actors:"Samuel L. Jackson}})"
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.movies.update({"_id" : ObjectId("600076354b21dd8ed3f8c69f")},{$push:{actors:"Samuel L. Jackson"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c69e"),
       "title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999,
       "actors" : [
```

■ Select Command Prompt – 🗗 🗙

```
"title" : "Fight Club",
       "writer" : "Chuck Palahniuko",
       "year" : 1999
       "actors" : [
               "Brad Pitt",
               "Edward Norton"
       __id" : ObjectId("600076354b21dd8ed3f8c69f"),
       "title" : "Pulp Fiction",
       "writer" : "Quentin Tarantino",
       "year" : 1994,
       "actors" : [
               "John Travolta",
               "Uma Thurman",
               "Samuel L. Jackson"
       " id" : ObjectId("600076354b21dd8ed3f8c6a0"),
       "title" : "Inglorious Basterds",
       "writer" : "Quentin Tarantino",
       "year" : 2009,
       "actors" : [
               "Brad Pitt",
               "Diane Kruger",
               "Eli Roth"
       __id" : ObjectId("600076354b21dd8ed3f8c6a1"),
       "title" : "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "The Hobbit",
       "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."
       " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
```

```
"writer" : " J.R.R. Tolkein",
       "year" : 2013,
        "franchise" : "The Hobbit<mark>"</mark>,
        "synopsis" : "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
        " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title": "The Hobbit: The Battle of the Five Armies",
       "writer": "J.R.R. Tolkein",
        "year" : 2012,
       "franchise" : "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 risin
 darkness."
       " id" : ObjectId("600076354b21dd8ed3f8c6a1"),
        "title" : "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "The Hobbit",
       "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."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({$text:{$search:"Gandalf"}}).pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
       "year" : 2013,
        "franchise": "The Hobbit",
       "synopsis": "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({$and:[{synopsis:{$regex:"Bilbo"}},{synopsis:{$not:/Gandalf/}}]})
  id" : ObjectId("600076354b21dd8ed3f8c6a1"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit",
synopsis" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it
 - from the dragon Smaug." }
 __id" : ObjectId("600076354b21dd8ed3f8c6a3"), "title" : "The Hobbit: The Battle of the Five Armies", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Ho
bbit", "synopsis" : "Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({$and:[{synopsis:{$regex:"Bilbo"}},{synopsis:{$not:/Gandalf/}}]}).pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c6a1"),
```

```
id" : ObjectId("600076354b21dd8ed3f8c6a1"),
       "title": "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "The Hobbit",
       "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."
       " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "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 risin
 darkness."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({$or:[{synopsis:{$regex:"dwarves"}},{synopsis:{$regex:"hobbit"}}]}).pretty()
       " id" : ObjectId("600076354b21dd8ed3f8c6a1"),
       "title": "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "The Hobbit",
       "synopsis" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold
within it - from the dragon Smaug."
       " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer": " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit",
       "synopsis" : "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
OngoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find({$and:[{synopsis:{$regex:"gold"}},{synopsis:{$regex:"dragon"}}]}).pretty()
       "id": ObjectId("600076354b21dd8ed3f8c6a1"),
       "title" : "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "The Hobbit",
```

– 🗇 X

```
"year" : 2012,
        "franchise" : "The Hobbit<mark>"</mark>,
        "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."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.remove({"_id" : ObjectId("600076354b21dd8ed3f8c6a4")})
WriteResult({ "nRemoved" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.remove({"_id" : ObjectId("600076354b21dd8ed3f8c6a5")})
WriteResult({ "nRemoved" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.movies.find().pretty()
        "_id" : ObjectId("600076354b21dd8ed3f8c69e"),
        "title" : "Fight Club",
        "writer" : "Chuck Palahniuko",
        "year" : 1999,
        "actors" : [
                "Brad Pitt",
                "Edward Norton"
        " id" : ObjectId("600076354b21dd8ed3f8c69f"),
        "title" : "Pulp Fiction",
        "writer" : "Quentin Tarantino",
        "year" : 1994,
        "actors" : [
                "John Travolta",
                "Uma Thurman",
                "Samuel L. Jackson"
        "_id" : ObjectId("600076354b21dd8ed3f8c6a0"),
        "title" : "Inglorious Basterds",
        "writer" : "Quentin Tarantino",
        "year" : 2009,
        "actors" : [
                "Brad Pitt",
                "Diane Kruger",
                "Eli Roth"
        " id" : ObjectId("600076354b21dd8ed3f8c6a1")
```

■ Select Command Prompt – □ X

```
__id" : ObjectId("600076354b21dd8ed3f8c6a1")
       "title": "The Hobbit: An Unexpected Journey",
       "writer": "J.R.R. Tolkein",
       "year" : 2012,
       "franchise": "The Hobbit",
       "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."
       " id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer" : " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit",
       "synopsis" : "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
       " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "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 risin
 darkness."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.createCollection('users')
       "ok" : 1,
       "$clusterTime" : {
               "clusterTime" : Timestamp(1610644209, 1),
               "signature" : {
                        "hash" : BinData(0, "1gXfqDfNZyONL0A5u2MNzEgnqz0="),
                        "keyId" : NumberLong("6858480936787378180")
        "operationTime" : Timestamp(1610644209, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.insert({
..... username : "GoodGuyGreg",
... ... first_name : "Good Guy",
.. ... last_name : "Greg",
     .. username : "ScumbagSteve",
```

Question-3:

Insert the following documents into a users collection

username: GoodGuyGreg

first_name: "Good Guy"

last_name: "Greg"

username: ScumbagSteve

full_name:

first: "Scumbag"

last: "Steve"

Insert the following documents into a posts collection

username: GoodGuyGreg

title: Passes out at party

body: Wakes up early and cleans house

username: GoodGuyGreg

title: Steals your identity

body: Raises your credit score

username: GoodGuyGreg

title: Reports a bug in your code

body : Sends you a Pull Request

username: Scumbag Steve

title: Borrows something

body: Sells it

username: ScumbagSteve

title: Borrows everything

body: The end

username: ScumbagSteve

title: Forks your repo on github

body: Sets to private

Insert the following documents into a comments collection

username: GoodGuyGreg

comment: Hope you got a good deal!

post : [post_obj_id] where [post_obj_id] is the ObjectId of the posts

document: "Borrows something"

username: GoodGuyGreg

comment: What's mine is yours!

post : [post_obj_id] where [post_obj_id] is the ObjectId of the posts

document: "Borrows everything"

username: GoodGuyGreg

comment: Don't violate the licensing agreement!

post : [post_obj_id] where [post_obj_id] is the ObjectId of the posts

document: "Forks your repo on github

username: ScumbagSteve

comment: It still isn't clean

post: [post_obj_id] where [post_obj_id] is the ObjectId of the posts

document: "Passes out at party"

username: ScumbagSteve

comment : Denied your PR cause I found a hack

post : [post_obj_id] where [post_obj_id] is the ObjectId of the posts

document: "Reports a bug in your code"

Querying related collections

- 1. find all users
- 2. find all posts
- 3. find all posts that was authored by "GoodGuyGreg"
- 4. find all posts that was authored by "ScumbagSteve"
- 5. find all comments
- 6. find all comments that was authored by "GoodGuyGreg"
- 7. find all comments that was authored by "ScumbagSteve"
- 8. find all comments belonging to the post "Reports a bug in your code"

Solution:

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.createCollection('users')
    "ok": 1,
    "$clusterTime": {
         "clusterTime": Timestamp(1610644209, 1),
         "signature" : {
             "hash": BinData(0,"1gXfqDfNZy0NL0A5u2MNzEgnqz0="),
             "keyId": NumberLong("6858480936787378180")
         }
    },
    "operationTime": Timestamp(1610644209, 1)
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.insert({
... ... username: "GoodGuyGreg",
```

```
... ... first_name : "Good Guy",
... ... last_name : "Greg",
... ... username: "ScumbagSteve",
... ... "full_name" :
... ... { first : "Scumbag",
... ... last: "Steve"
... ... }})
WriteResult({ "nInserted" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.users.find().pretty()
{
    "_id": ObjectId("60007b064b21dd8ed3f8c6a6"),
     "username": "ScumbagSteve",
     "first_name": "Good Guy",
     "last_name" : "Greg",
     "full_name" : {
          "first": "Scumbag",
         "last": "Steve"
     }
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.createCollection('posts')
{
    "ok": 1,
     "$clusterTime" : {
```

```
"clusterTime" : Timestamp(1610644266, 1),
         "signature" : {
              "hash": BinData(0,"EdvLZNV/VRpxhfil/kTZzQcYuRA="),
              "keyId": NumberLong("6858480936787378180")
         }
    },
    "operationTime": Timestamp(1610644266, 1)
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.insert([{username:"GoodGuyGreg",title:"Passes out at
party",body:"Wakes up early and cleans house"},{username:
"GoodGuyGreg", title: "Steals your identity", body: "Raises your credit
score"}, {username : "GoodGuyGreg", title : "Reports a bug in your code",
body: "Sends you a Pull Request"}, {username: "ScumbagSteve", title:
"Borrows something", body: "Sells it", {username: "ScumbagSteve", title:
"Borrows everything", body: "The end"}, {username: "ScumbagSteve", title
: "Forks your repo on github", body : "Sets to private"}])
BulkWriteResult({
    "writeErrors" : [ ],
    "writeConcernErrors":[],
     "nInserted": 6,
    "nUpserted": 0,
     "nMatched": 0,
     "nModified": 0,
    "nRemoved": 0,
    "upserted":[]
})
```

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.find().pretty()
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6a7"),
    "username": "GoodGuyGreg",
    "title": "Passes out at party",
    "body": "Wakes up early and cleans house"
}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6a8"),
    "username": "GoodGuyGreg",
    "title": "Steals your identity",
    "body": "Raises your credit score"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6a9"),
    "username": "GoodGuyGreg",
    "title": "Reports a bug in your code",
    "body" : "Sends you a Pull Request"
}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6aa"),
    "username": "ScumbagSteve",
    "title": "Borrows something",
    "body": "Sells it"
```

```
}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6ab"),
    "username": "ScumbagSteve",
    "title": "Borrows everything",
    "body": "The end"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6ac"),
    "username": "ScumbagSteve",
    "title": "Forks your repo on github",
    "body" : "Sets to private"
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.createCollection('comments')
{
    "ok": 1,
    "$clusterTime": {
         "clusterTime" : Timestamp(1610644365, 1),
         "signature" : {
              "hash":
BinData(0,"edLqOgxLMEcPWsed7b3vmZUFw6k="),
             "keyId": NumberLong("6858480936787378180")
         }
    },
```

```
"operationTime": Timestamp(1610644365, 1)
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.insert([
... {username : "GoodGuyGreg", comment : "Hope you got a good deal!",
post: {"_id": ObjectId("60007b424b21dd8ed3f8c6aa")}},{username:
"GoodGuyGreg", comment: "What's mine is yours!", post: {"_id":
ObjectId("60007b424b21dd8ed3f8c6ab")}}, {username: "GoodGuyGreg",
comment: "Don't violate the licensing agreement!", post: {" id":
ObjectId("60007b424b21dd8ed3f8c6ac")}}, {username : "ScumbagSteve",
comment: "It still isn't clean", post: {"_id":
ObjectId("60007b424b21dd8ed3f8c6a7")}},{username: "ScumbagSteve",
comment: "Denied your PR cause I found a hack", post: {"_id":
ObjectId("60007b424b21dd8ed3f8c6a9")}}])
BulkWriteResult({
    "writeErrors":[],
    "writeConcernErrors":[],
    "nInserted": 5,
    "nUpserted": 0,
    "nMatched": 0,
    "nModified": 0,
    "nRemoved": 0,
    "upserted":[]
})
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.users.find().pretty()
    "_id": ObjectId("60007b064b21dd8ed3f8c6a6"),
```

```
"username": "ScumbagSteve",
    "first_name": "Good Guy",
    "last_name": "Greg",
    "full_name" : {
         "first": "Scumbag",
         "last": "Steve"
     }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.find().pretty()
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6a7"),
    "username": "GoodGuyGreg",
    "title": "Passes out at party",
    "body": "Wakes up early and cleans house"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6a8"),
    "username": "GoodGuyGreg",
    "title": "Steals your identity",
    "body": "Raises your credit score"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6a9"),
    "username": "GoodGuyGreg",
```

```
"title": "Reports a bug in your code",
    "body": "Sends you a Pull Request"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6aa"),
    "username": "ScumbagSteve",
    "title": "Borrows something",
    "body": "Sells it"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6ab"),
    "username": "ScumbagSteve",
    "title": "Borrows everything",
    "body": "The end"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6ac"),
    "username": "ScumbagSteve",
    "title": "Forks your repo on github",
    "body": "Sets to private"
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.find({"username":"GoodGuyGreg"}).pretty()
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6a7"),
```

```
"username": "GoodGuyGreg",
    "title": "Passes out at party",
    "body": "Wakes up early and cleans house"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6a8"),
    "username": "GoodGuyGreg",
    "title": "Steals your identity",
    "body": "Raises your credit score"
}
    "_id": ObjectId("60007b424b21dd8ed3f8c6a9"),
    "username": "GoodGuyGreg",
    "title": "Reports a bug in your code",
    "body": "Sends you a Pull Request"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.find({"username":"ScumbagSteve"}).pretty()
{"t":{"$date":"2021-01-14T17:22:02.711Z"},"s":"W", "c":"NETWORK",
"id":23019, "ctx":"ReplicaSetMonitor-TaskExecutor","msg":"DNS
resolution while connecting to peer was slow","attr":{"peer":"cluster0-shard-
00-02.6vujr.mongodb.net:27017","durationMillis":4270}}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6aa"),
    "username": "ScumbagSteve",
```

```
"title": "Borrows something",
    "body": "Sells it"
}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6ab"),
    "username": "ScumbagSteve",
    "title": "Borrows everything",
    "body": "The end"
}
{
    "_id": ObjectId("60007b424b21dd8ed3f8c6ac"),
    "username": "ScumbagSteve",
    "title": "Forks your repo on github",
    "body": "Sets to private"
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.comments.find().pretty()
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6ad"),
    "username": "GoodGuyGreg",
    "comment": "Hope you got a good deal!",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6aa")
}
```

```
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6ae"),
    "username": "GoodGuyGreg",
    "comment": "What's mine is yours!",
    "post" : {
         "\_id" : ObjectId("60007b424b21dd8ed3f8c6ab")
    }
}
    "_id": ObjectId("60007d404b21dd8ed3f8c6af"),
    "username": "GoodGuyGreg",
    "comment": "Don't violate the licensing agreement!",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6ac")
    }
}
    "_id": ObjectId("60007d404b21dd8ed3f8c6b0"),
    "username": "ScumbagSteve",
    "comment": "It still isn't clean",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6a7")
}
```

```
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6b1"),
    "username": "ScumbagSteve",
    "comment": "Denied your PR cause I found a hack",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6a9")
    }
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.comments.find({"username":"GoodGuyGreg"}).pretty()
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6ad"),
    "username": "GoodGuyGreg",
    "comment": "Hope you got a good deal!",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6aa")
    }
}
    "_id": ObjectId("60007d404b21dd8ed3f8c6ae"),
    "username": "GoodGuyGreg",
    "comment": "What's mine is yours!",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6ab")
    }
```

```
}
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6af"),
    "username": "GoodGuyGreg",
    "comment": "Don't violate the licensing agreement!",
    "post" : {
         "_id" : ObjectId("60007b424b21dd8ed3f8c6ac")
    }
}
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.comments.find({"username":"ScumbagSteve"}).pretty()
{
    "_id": ObjectId("60007d404b21dd8ed3f8c6b0"),
    "username": "ScumbagSteve",
    "comment": "It still isn't clean",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6a7")
    }
}
    "_id": ObjectId("60007d404b21dd8ed3f8c6b1"),
    "username": "ScumbagSteve",
    "comment": "Denied your PR cause I found a hack",
    "post" : {
         "_id": ObjectId("60007b424b21dd8ed3f8c6a9")
```

```
}

MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.comments.find({"title":"Reports a bug in your code"}).pretty()

MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.comments.find({title:"Reports a bug in your code"}).pretty()

MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
db.posts.find({title:"Reports a bug in your code"}).pretty()

{

    "_id" : ObjectId("60007b424b21dd8ed3f8c6a9"),

    "username" : "GoodGuyGreg",

    "title" : "Reports a bug in your code",

    "body" : "Sends you a Pull Request"
}
```

Screenshots:

```
- 🗗 X
Select Command Prompt
       " id" : ObjectId("600076354b21dd8ed3f8c6a1")
       "title" : "The Hobbit: An Unexpected Journey",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "The Hobbit",
       "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."
       "_id" : ObjectId("600076354b21dd8ed3f8c6a2"),
       "title": "The Hobbit: The Desolation of Smaug",
       "writer": " J.R.R. Tolkein",
       "year" : 2013,
       "franchise" : "The Hobbit",
       "synopsis": "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is i
 possession of mysterious and magical ring."
       " id" : ObjectId("600076354b21dd8ed3f8c6a3"),
       "title" : "The Hobbit: The Battle of the Five Armies",
       "writer" : "J.R.R. Tolkein",
       "year" : 2012,
       "franchise" : "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 risin
 darkness."
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.createCollection('users')
       "ok" : 1,
       "$clusterTime" : {
               "clusterTime" : Timestamp(1610644209, 1),
               "signature" : {
                       "hash" : BinData(0,"1gXfqDfNZy0NL0A5u2MNzEgnqz0="),
                        "keyId" : NumberLong("6858480936787378180")
        "operationTime" : Timestamp(1610644209, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.insert({
..... username: "GoodGuyGreg",
... ... first_name : "Good Guy",
 .. ... last_name : "Greg",
      username : "ScumbagSteve"
```

■ Select Command Prompt – 🗇 🗙

```
"operationTime" : Timestamp(1610644209, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.insert({
... ... username : "GoodGuyGreg",
... ... first name : "Good Guy",
.. ... last_name : "Greg",
.....username : "ScumbagSteve",
.. ... "full name" :
..... { first : "Scumbag",
... ... last : "Steve"
.. ... }})
WriteResult({ "nInserted" : 1 })
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.find().pretty()
       " id" : ObjectId("60007b064b21dd8ed3f8c6a6"),
       "username" : "ScumbagSteve",
       "first name" : "Good Guy",
       "last_name" : "Greg",
       "full name" : {
               "first" : "Scumbag",
               "last" : "Steve"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.createCollection('posts')
       "ok" : 1,
       "$clusterTime" : {
               "clusterTime" : Timestamp(1610644266, 1),
               "signature" : {
                       "hash" : BinData(0, "EdvLZNV/VRpxhfil/kTZzQcYuRA="),
                       "keyId" : NumberLong("6858480936787378180")
        "operationTime" : Timestamp(1610644266, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.insert([{username:"GoodGuyGreg",title:"Passes out at party",body:"Wakes up early and cleans house"},{username
 "GoodGuyGreg", title: "Steals your identity", body: "Raises your credit score"}, {username: "GoodGuyGreg", title: "Reports a bug in your code", body: "Sends you
 Pull Request"}, {username : "ScumbagSteve", title : "Borrows something", body : "Sells it"}, {username : "ScumbagSteve", title : "Borrows everything", body : "The end
"},{username : "ScumbagSteve", title : "Forks your repo on github", body : "Sets to private"}])
BulkWriteResult({
       "writeErrors" : [ ],
       "writeConcernErrors" : [ ],
       "nInserted" : 6.
```

- Ō X

```
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.posts.insert([{username:"GoodGuyGreg",title:"Passes out at party",body:"Wakes up early and cleans house"},{username 🔥
 "GoodGuyGreg", title: "Steals your identity", body: "Raises your credit score"}, {username: "GoodGuyGreg", title: "Reports a bug in your code", body: "Sends you
a Pull Request"}, {username : "ScumbagSteve", title : "Borrows something", body : "Sells it"}, {username : "ScumbagSteve", title : "Borrows everything", body : "The end
"},{username : "ScumbagSteve", title : "Forks your repo on github", body : "Sets to private"}])
BulkWriteResult({
       "writeErrors" : [ ],
       "writeConcernErrors" : [ ],
       "nInserted" : 6,
       "nUpserted" : 0,
       "nMatched" : 0,
       "nModified" : 0,
       "nRemoved" : 0,
       "upserted" : [ ]
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find().pretty()
       " id" : ObjectId("60007b424b21dd8ed3f8c6a7"),
       "username" : "GoodGuyGreg",
       "title" : "Passes out at party",
       "body" : "Wakes up early and cleans house"
       " id" : ObjectId("60007b424b21dd8ed3f8c6a8"),
       "username" : "GoodGuyGreg",
       "title": "Steals your identity",
       "body" : "Raises your credit score"
       " id" : ObjectId("60007b424b21dd8ed3f8c6a9"),
       "username" : "GoodGuyGreg",
       "title" : "Reports a bug in your code",
       "body" : "Sends you a Pull Request"
       " id" : ObjectId("60007b424b21dd8ed3f8c6aa"),
       "username" : "ScumbagSteve",
       "title": "Borrows something",
       "body" : "Sells it"
       " id" : ObjectId("60007b424b21dd8ed3f8c6ab"),
       "username" : "ScumbagSteve",
       "title": "Borrows everything",
       "body": "The end"
```

```
"title" : "Borrows everything",
        "body" : "The end
       " id" : ObjectId("60007b424b21dd8ed3f8c6ac"),
       "username" : "ScumbagSteve",
       "title": "Forks your repo on github",
       "body" : "Sets to private"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.createCollection('comments')
       "ok" : 1,
       "$clusterTime" : {
               "clusterTime" : Timestamp(1610644365, 1),
               "signature" : {
                       "hash" : BinData(0, "edLqOgxLMEcPWsed7b3vmZUFw6k="),
                       "keyId" : NumberLong("6858480936787378180")
        "operationTime" : Timestamp(1610644365, 1)
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.insert([
.. {username : "GoodGuyGreg", comment : "Hope you got a good deal!", post : {"_id" : ObjectId("60007b424b21dd8ed3f8c6aa")}}, {username : "GoodGuyGreg", comment : "What'
s mine is yours!", post :{"_id" : ObjectId("60007b424b21dd8ed3f8c6ab")}},{username : "GoodGuyGreg", comment : "Don't violate the licensing agreement!", post : {"_id" :
ObjectId("60007b424b21dd8ed3f8c6ac")}},,{username : "ScumbagSteve", comment : "It still isn't clean", post :{" id" : ObjectId("60007b424b21dd8ed3f8c6a7")}},,{username :
ScumbagSteve", comment : "Denied your PR cause I found a hack", post : {" id" : ObjectId("60007b424b21dd8ed3f8c6a9")}}])
BulkWriteResult({
       "writeErrors" : [ ],
       "writeConcernErrors" : [ ],
       "nInserted" : 5,
       "nUpserted" : 0,
       "nMatched" : 0,
       "nModified" : 0,
       "nRemoved" : 0,
       "upserted" : [ ]
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.users.find().pretty()
       "_id" : ObjectId("60007b064b21dd8ed3f8c6a6"),
       "username" : "ScumbagSteve",
       "first_name" : "Good Guy",
       "last_name" : "Greg",
       "full name" : {
               "first": "Scumbag",
```

```
"full name" : {
               "first": "Scumbag",
               "last" : "Steve"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find().pretty()
       "_id" : ObjectId("60007b424b21dd8ed3f8c6a7"),
       "username" : "GoodGuyGreg",
       "title" : "Passes out at party",
       "body" : "Wakes up early and cleans house"
       "_id" : ObjectId("60007b424b21dd8ed3f8c6a8"),
       "username" : "GoodGuyGreg",
       "title" : "Steals your identity",
       "body" : "Raises your credit score"
       " id" : ObjectId("60007b424b21dd8ed3f8c6a9"),
       "username" : "GoodGuyGreg",
       "title" : "Reports a bug in your code",
       "body" : "Sends you a Pull Request"
       " id" : ObjectId("60007b424b21dd8ed3f8c6aa"),
       "username" : "ScumbagSteve",
       "title" : "Borrows something",
       "body" : "Sells it"
       " id" : ObjectId("60007b424b21dd8ed3f8c6ab"),
       "username" : "ScumbagSteve",
       "title" : "Borrows everything",
       "body" : "The end"
       " id" : ObjectId("60007b424b21dd8ed3f8c6ac"),
       "username" : "ScumbagSteve",
       "title" : "Forks your repo on github",
       "body" : "Sets to private"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find({"username":"GoodGuyGreg"}).pretty()
```

■ Select Command Prompt – ☐ X

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find({"username":"GoodGuyGreg"}).pretty()
        " id" : ObjectId("60007b424b21dd8ed3f8c6a7"),
        "username" : "GoodGuyGreg",
       "title" : "Passes out at party",
        "body" : "Wakes up early and cleans house"
       " id" : ObjectId("60007b424b21dd8ed3f8c6a8"),
        "username" : "GoodGuyGreg",
       "title" : "Steals your identity",
        "body" : "Raises your credit score"
       " id" : ObjectId("60007b424b21dd8ed3f8c6a9"),
       "username" : "GoodGuyGreg",
       "title" : "Reports a bug in your code",
       "body" : "Sends you a Pull Request"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find({"username":"ScumbagSteve"}).pretty()
 t":{"$date":"2021-01-14T17:22:02.711Z"},"s":"W", "c":"NETWORK", "id":23019, "ctx":"ReplicaSetMonitor-TaskExecutor","msg":"DNS resolution while connecting to peer
was slow","attr":{"peer":"cluster0-shard-00-02.6vujr.mongodb.net:27017","durationMillis":4270}}
        " id" : ObjectId("60007b424b21dd8ed3f8c6aa"),
        "username" : "ScumbagSteve",
       "title": "Borrows something",
       "body" : "Sells it"
       "id": ObjectId("60007b424b21dd8ed3f8c6ab"),
       "username" : "ScumbagSteve",
       "title": "Borrows everything",
        "body": "The end"
       "id": ObjectId("60007b424b21dd8ed3f8c6ac"),
       "username" : "ScumbagSteve",
       "title" : "Forks your repo on github",
       "body" : "Sets to private"
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> {
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
```

```
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY>
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find().pretty()
        " id" : ObjectId("60007d404b21dd8ed3f8c6ad"),
        "username" : "GoodGuyGreg",
        "comment" : "Hope you got a good deal!",
        "post" : {
                " id" : ObjectId("60007b424b21dd8ed3f8c6aa")
        "_id" : ObjectId("60007d404b21dd8ed3f8c6ae"),
        "username" : "GoodGuyGreg",
        "comment" : "What's mine is yours!",
        "post" : {
                __id" : ObjectId("60007b424b21dd8ed3f8c6ab")
        " id" : ObjectId("60007d404b21dd8ed3f8c6af"),
        "username" : "GoodGuyGreg",
        "comment": "Don't violate the licensing agreement!",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6ac")
        " id" : ObjectId("60007d404b21dd8ed3f8c6b0"),
        "username" : "ScumbagSteve",
        "comment": "It still isn't clean",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6a7")
        "_id" : ObjectId("60007d404b21dd8ed3f8c6b1"),
        "username" : "ScumbagSteve",
        "comment": "Denied your PR cause I found a hack",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6a9")
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({"username":"GoodGuyGreg"}).pretty()
```

```
.
| MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({"username":"GoodGuyGreg"}).pretty
        " id" : ObjectId("60007d404b21dd8ed3f8c6ad"),
        "username" : "GoodGuyGreg",
       "comment" : "Hope you got a good deal!",
        "post" : {
                __id" : ObjectId("60007b424b21dd8ed3f8c6aa")
        "_id" : ObjectId("60007d404b21dd8ed3f8c6ae"),
       "username" : "GoodGuyGreg",
        "comment" : "What's mine is yours!",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6ab")
        "_id" : ObjectId("60007d404b21dd8ed3f8c6af"),
       "username" : "GoodGuyGreg",
       "comment": "Don't violate the licensing agreement!",
        "post" : {
                " id" : ObjectId("60007b424b21dd8ed3f8c6ac")
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({"username":"ScumbagSteve"}).pretty()
        "_id" : ObjectId("60007d404b21dd8ed3f8c6b0"),
        "username" : "ScumbagSteve",
        "comment": "It still isn't clean",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6a7")
        " id" : ObjectId("60007d404b21dd8ed3f8c6b1"),
        "username" : "ScumbagSteve",
        "comment": "Denied your PR cause I found a hack",
        "post" : {
                "_id" : ObjectId("60007b424b21dd8ed3f8c6a9")
.
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({"title":"Reports a bug in your code"}).pretty()
```

```
Select Command Prompt
.
MongoDB Enterprise atlas-1291i4-shard-0:PRIMARY> db.comments.find({"title":"Reports a bug in your code"}).pretty()
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({title:"Reports a bug in your code"}).pretty()
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.posts.find({title:"Reports a bug in your code"}).pretty()
       _id" : ObjectId("60007b424b21dd8ed3f8c6a9"),
        "username" : "GoodGuyGreg",
       "title" : "Reports a bug in your code",
       "body" : "Sends you a Pull Request"
.
MongoDB Enterprise atlas-129li4-shard-0:PRIMARY> db.comments.find({}).pretty()^C
C:\Users\vinnu>
```