}])

```
MongoDB Lab Assignments -Day 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.
db.movies.insertMany([
"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": "Inglorius Bastards",
 "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 Five Armies",
 "writer": "J.R.R. Tolkein",
 "year":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."
 },{
 "title": "Pee Wee Herman's Big Adventure"
 },{
 "title":"Avatar"
```

1. get all documents

db.movies.find()

- 2. get all documents with writer set to "Quentin Tarantino"
   db.movies.find({"writer":"Quentin Tarantino"})
- 3. get all documents where actors include "Brad Pitt"

```
db.movies.find({"actors": "Brad Pitt"}).pretty()
```

4. get all documents with franchise set to "The Hobbit"

db.movies.find({"franchise":"The Hobbit"}).pretty()

5. get all movies released in the 90s

db.movies.find({year: {\$1t: 2000}}).pretty()

6. get all movies released before the year 2000 or after 2010

db.movies.find({'\$or':[{"year":{'\$lt':2000}}, {"year":{'\$gt':2010}}]}).pretty()

# **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."

```
db.movies.updateOne({$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."}})
```

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."

```
db.movies.updateOne({$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."}})
```

3. add an actor named "Samuel L. Jackson" to the movie "Pulp Fiction"

db.movies.updateOne({"title":"Pulp Fiction"},{\$addToSet: { actors: "Samuel L. Jackson"

} } )

#### Text Search

db.movies.createIndex({synopsis:"text"})

- 1. find all movies that have a synopsis that contains the word "Bilbo" db.movies.find({\$text:{\$search:"Bilbo"}}).pretty()
- 2. find all movies that have a synopsis that contains the word "Gandalf" db.movies.find({\$text:{\$search:"Gandalf"}}).pretty()
- 3. find all movies that have a synopsis that contains the word "Bilbo" and not the word "Gandalf"

db.movies.find({\$text:{\$search:'Bilbo -Gandalf'}}).pretty()

- 4. find all movies that have a synopsis that contains the word "dwarves" or "hobbit" db.movies.find({\$or:[{\$text:{\$search:'dwarves, hobbit'}}]}).pretty()
- 5. find all movies that have a synopsis that contains the word "gold" and "dragon" db.movies.find({\$text:{\$search:'gold, dragon'}}).pretty()

#### **Delete Documents**

1. delete the movie "Pee Wee Herman's Big Adventure"

db.movies.remove({"title":"Pee Wee Herman's Big Adventure"})

2. delete the movie "Avatar"

db.movies.remove({"title":"Avatar"})

Relationships 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 : ScumbagSteve

cu D

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

### db.users.find()

2. find all posts

# db.posts.find()

3. find all posts that was authored by "GoodGuyGreg"

db.posts.find({"username":"GoodGuyGreg"})

4. find all posts that was authored by "ScumbagSteve"

db.posts.find({"username":"ScumbagSteve"})

5. find all comments

#### db.comments.find()

6. find all comments that was authored by "GoodGuyGreg"

db.comments.find({"username":"GoodGuyGreg"})

7. find all comments that was authored by "ScumbagSteve"

db.comments.find({"username":"ScumbagSteve"})

8. find all comments belonging to the post "Reports a bug in your code"

db.comments.find({"post":"Report a bug in your code"})