Poonguzhali A

MongoDB-Assignments1

MongoDB Exercise in mongo shell

Insert Documents

Insert the following documents into a **movies** collection.

```
mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase
Microsoft Windows [Version 10.0.22000.434]
(c) Microsoft Corporation. All rights reserved.
 :\Users\poong>mongosh
Current Mongosh Log ID: 62022b9ee418adf6a6352963
 longoNetworkError: connect ECONNREFUSED 127.0.0.1:27017
C:\Users\poong>mongosh mongosh "mongodb+srv://cluster0.4q57k.mongodb.net/myFirstDatabase" --username Poonguzhali
Current Mongosh Log ID: 62022bae80ad377040b514db
Connecting to: mongodb://127.0.0.1:27017/mongo:
MongoNetworkError: connect ECONNREFUSED 127.0.0.1:27017
C:\Users\poong>db.createCollection("movies")
'db.createCollection' is not recognized as an internal or external command,
operable program or batch file.
 :\Users\poong>mongosh "mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase" --username poonguzhali
Current Mongosh Log ID: 62022c588e54f517f5bd511f
 onnecting to:
                            mongodb
4.4.12
 sing MongoDB:
Using Mongosh:
                            1.1.9
 or mongosh info see: https://docs.mongodb.com/mongodb-shell/
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.insert({title: "fight club", writer:"Chuck Palahniuko", year: "1999", actors:["Brad Pitt Edward Norton"]})
  acknowledged: true,
insertedIds: { '0': ObjectId("62022ef2fe586889b81443e8") }
```

```
tiss atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "pulp fiction", switer:"quentin tarantimo", year: "1994", actors:["john travolta usa thorsam"]))

schomoleged: true,
insertedids: ("0": ObjectId("63023137658888881443e"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "implorious basterds", switer:"quentin tarantimo", year: "2000", actors:["brad pitt diame kruger ell roth"]))

schomoleged: true,
insertedids: ("0": ObjectId("63023137658888881443e"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:m unexpected journey", switer:"j.r.r.tolkein", year: "2012", franchise:["the hobbit"]))

schomoleged: true,
insertedids: ("0": ObjectId("6302324bf58888881443eb"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:the desolation of smoog", switer:"j.r.r.tolkein", year: "2013", franchise:["the hobbit"]))

states atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:the desolation of smoog", switer:"j.r.r.tolkein", year: "2013", franchise:["the hobbit"]))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:the desolation of smoog", switer:"j.r.r.tolkein", year: "2013", franchise:["the hobbit"]))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:the desolation of smoog"))

schomoleged: true,
insertedids: ("0": ObjectId("620236s7fe586889881443ed"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "the hobbit:the desolation of smoog"))

schomoleged: true,
insertedids: ("0": ObjectId("620236s7fe586889881443ed"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "mouter")))

schomoleged: true,
insertedids: ("0": ObjectId("620236s7fe586889881443ed"))

Atlas atlas-8a5gr-shard-0 [primary] swfirstDatabase ob movi.insert((title: "mouter"))

schomoleged: true,
insertedids: ("0": ObjectId("620236s7fe586889881443ed"))

Atlas atlas-8a5gr-shard-0 [primary] sw
```

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

mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase

```
tiss atlas-8a5g-shan-0 [priary] myfirstbatabase db.movi.find(())

{
    jd: ObjectId("G0022e2fs6888980445e0"),
    title: "rgipt clob,
    writer: "Chock Foldamido",
    year: "You",
    jed: ObjectId("G00212e1fs688898044e0"),
    title: wild Fiction",
    writer: "quentin tarmatino",
    year: "You",
    actors: [ 'short results was thurson']

{
    jd: ObjectId("G00212e1fs688898044e0"),
    title: inplorious basters0 ,
    writer: "quentin tarmatino",
    year: "You",
    actors: [ 'short results was thurson']

}

jd: ObjectId("G00212e1fs688898044de0"),
    title: the hobbits in unsequented journey',
    writer: "year.tolkein',
    year: "You",
    franchise: [ 'the hobbits']

}

jd: ObjectId("G00212e1fs688898044de0"),
    title: the hobbits the decolution of smoog,
    writer: "j.r.r.tolkein',
    year: "You",
    franchise: [ 'the hobbits']

jd: ObjectId("G00210e1fs688898044de0"),
    title: the hobbits the hobbits']

jd: ObjectId("G00210e1fs688898044de0"),
    title: the hobbits the hobbits']

jd: ObjectId("G00210e1fs688898044de0"),
    title: the hobbits the hobbits']

year: "You",
    year: "You",
    franchise: [ 'the hobbits']

jd: ObjectId("G00210e1fs68898044de0"),
    title: the hobbits the hobbits'],
    year: "You",
    year: "You",
    franchise: [ 'the hobbits'],
    year: "You",
    year: "You",
    year: "You",
    year: "You",
    year: "You",
    franchise: [ 'the hobbits'],
    year: "You",
    year: "You",
    jear: "You",
```

```
mongosh mongodh+srv://cluster0.chnhl.mongodh.net/mvEirstDatabas
     _id: ObjectId("620236a7fe586889b81443ed"),
title: 'the hobbit:the battle of the five armies',
     year: '2012',
franchise: [ 'the hobbit' ],
synopsis: 'bilbo and company
 Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:"{$gte:1990,$lte:1999}"})
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:"{$gt:1990,$lt:1999}"})
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:{$gt:1990,$1t:1999}})
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:{$gt:("1990"),$lt:("1999")}})
    id: ObjectId("62023132fe586889b81443e9"),
title: 'pulp fiction',
writer: 'quentin tarantino',
year: '1994',
actors: [ 'john travolta uma thurman']
.
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:{$lt:("2000"),$gt:("2010")}})
    _id: ObjectId("62022ef2fe586889b81443e8"),
title: 'fight club',
writer: 'Chuck Palahniuko',
year: '1999',
actors: [ 'Brad Pitt Edward Norton' ]
```

mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase

```
_id: ObjectId("62023132fe586889b81443e9"),
title: 'pulp fiction',
writer: 'quentin tarantino',
year: '1994',
actors: [ 'john travolta uma thurman']
 tlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({year:{$lt:("2000"),$gt:("2010")}})
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({$or:[{year:{$1t:"2000"}},{year:{$gt:"2010"}}]})
    _id: ObjectId("62022ef2fe586889b81443e8"), title: 'fight club', writer: 'Chuck Palahniuko',
     _id: ObjectId("62023132fe586889b81443e9"),
title: 'pulp fiction',
writer: 'quentin tarantino',
vear: '1904'
      year: '1994',
actors: [ 'john travolta uma thurman' ]
     _id: ObjectId("6202324bfe586889b81443eb"), title: 'the hobbit:an unexpected journey', writer: 'j.r.r.tolkein',
     year: '2012',
franchise: [ 'the hobbit' ]
     _id: ObjectId("620235eefe586889b81443ec"),
title: 'the hobbit:the desolation of smaug'
write: 'j.r.r.tolkein',
year: '2013',
franchise: [ 'the hobbit' ]
     _id: ObjectId("620236a7fe586889b81443ed"), title: 'the hobbit:the battle of the five armies', writer: 'j.r.r.tolkein',
     year: '2012',
franchise: [ 'the hobbit' ],
synopsis: 'bilbo and company
```

Update Documents

- 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"

```
Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.movi.update({title:"the hobbit:an unexpected journey"},{$set:{symopsis:"a reluctant hobbit,bilbo baggins,sets out to the lonely mountain with a spirited
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
 acknowledged: true,
 insertedId: null.
 matchedCount: 1,
 modifiedCount: 1.
  upsertedCount: 0
Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.movi.update({title:"the hobbit:the desolation of smaug"),{$set:{symopsis:"the dwarves,along with bilbo baggins and gandalf the grey,continue their quest
 acknowledged: true,
 insertedId: null,
 matchedCount: 1,
 modifiedCount: 1.
 upsertedCount: 0
.
Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.movi.update({title:"pulp fiction"},{$push:{actoactors:"samuel l.jackson"}})
 insertedId: null,
 matchedCount: 1,
 modifiedCount: 1,
 upsertedCount: 0
```

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"

find all movies that have a synopsis that contains the word "gold" and "dragon"

```
:las atlas-8ak5gr-shard-0 [primary] myFirstDatabase> db.movi.find({symopsis:/.bilbo/})
   year: '2012',
franchise: [ 'the hobbit' ],
synopsis: 'a reluctant hobbit
    id: ObjectId("620235eefe586889b81443ec"),
   year: '2013',
franchise: ['the hobbit'],
symposis: '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
symposis: '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
  las atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({synopsis:/.gandalf/})
    id: ObjectId("620235eefe586889b81443ec"),
  year: '2013',
franchise: [ 'the hobbit' ],
cuponsis: 'the dwarves,along
tlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find({$and:[{synopsis:/bilbo/},{synopsis:{$not:/gandalf/}}}]})
   year: '2012',
franchise: [ 'the hobbit' ],
franchise: 'a paluctant hobbit, bilbo bagging
    id: ObjectId("620236a7fe586889b81443ed"),
clas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.find(($or:[{synopsis:/dwarves/},{synopsis:/hobbit/}]})
  _id: ObjectId("6202324bfe586889b81443eb"), title: 'the hobbit:an unexpected journey', writer: 'j.r.r.tolkein',
    _id: ObjectId("620235eefe586889b81443ec"),
  year: '2013',
franchise: [ 'the hobbit' ],
```

Delete Documents

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

```
}

Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.remove({title:"pee wee hermans big adventure"})

TypeError: db.remove is not a function

Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.remove({title:"pee wee hermans big adventure"})

DeprecationWarning: Collection.remove() is deprecated. Use deleteOne, deleteMany, findOneAndDelete, or bulkWrite.
{ acknowledged: true, deletedCount: 1 }

Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.movi.remove({title:"avatar"})
{ acknowledged: true, deletedCount: 1 }

Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase>
```

Relationships

Insert the following documents into a users collection

```
{ acknowledged: true, deletedCount: 1 }
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.createCollection("user")
{ ok: 1 }
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.user.insert({username:"goodguygreg",firstname:"good guy",lastname:"greg"})
{
    acknowledged: true,
    insertedIds: { '0': ObjectId("62025113fe586889b81443f1") }
}
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.user.insert({username:"scumbagsteve",firstname:"scumbag",lastname:"steve"})
{
    acknowledged: true,
    insertedIds: { '0': ObjectId("62025153fe586889b81443f2") }
}
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> _

Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> _
```

Insert the following documents into a **posts** collection

Insert the following documents into a comments collection

```
Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",commentAtlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",commentAtlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",commentAtlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",comment: "whats mine is yours!",post:"2"})

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",comment: "whats mine is yours!",post:"2"})

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",comment: "dont violate the licensing agreement!",post:"3"})

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",comment: "dont violate the licensing agreement!",post:"3"})

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: goodguygreg",comment: "it still isnt clean",post:"4"})

Acknowledged: true,
insertedIds: { '0': ObjectId("62025630fe586889b81443ff") }

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: "scumbagsteve",comment: "it still isnt clean",post:"4"})

Acknowledged: true,
insertedIds: { '0': ObjectId("6202560afe586889b81443ff") }

Atlas atlas-8akSqr-shard-0 [primary] myFirstDatabase> db.comments.insert({username: "scumbagsteve",comment: "denied your pr cause i found a hack",post:"5"})

Acknowledged: true,
insertedIds: { '0': ObjectId("6202560bfe586889b814440f") }
```

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"

```
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.users.find({})
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.user.find({})
     id: ObjectId("62025113fe586889b81443f1"),
     username: 'goodguygreg',
firstname: 'good guy',
lastname: 'greg'
     _id: ObjectId("62025153fe586889b81443f2"),
     username: 'scumbagsteve',
firstname: 'scumbag',
lastname: 'steve'
     _id: ObjectId("62025232fe586889b81443f3"),
     username: 'goodguygreg',
title: 'passes out at party body:wakes up early and clean house'
     _id: ObjectId("62025262fe586889b81443f4"),
     username: 'goodguygreg',
title: 'steals your identity body:raise your credit score'
     _id: ObjectId("62025294fe586889b81443f5"),
     username: 'goodguygreg',
title: 'reports a bug in your code body:sends you a pull request'
     _id: ObjectId("62025338fe586889b81443f6"),
     _id. Objected (2022)381838 username: 'scumbagsteve', title: 'borrows something', body: 'sells it'
     _id: ObjectId("6202536dfe586889b81443f7"),
     username: 'scumbagsteve',
title: 'borrows everything',
body: 'the end'
     _id: ObjectId("620253a9fe586889b81443f8"),
    username: 'scumbagsteve',
title: 'forks your repo on github',
body: 'sets to private'
```

```
mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase
       id: ObjectId("62025262fe586889b81443f4"),
     username: 'goodguygreg',
title: 'steals your identity body:raise your credit score'
       _id: ObjectId("62025294fe586889b81443f5"),
     username: 'goodguygreg',
title: 'reports a bug in your code body:sends you a pull request'
       _id: ObjectId("62025338fe586889b81443f6"),
     _id. objects.
username: 'scumbagsteve',
title: 'borrows something',
body: 'sells it'
      username: 'scumbagsteve',
title: 'borrows everything',
body: 'the end'
       id: ObjectId("620253a9fe586889b81443f8"),
     username: 'scumbagsteve',
title: 'forks your repo on github',
body: 'sets to private'
       _id: ObjectId("620253c2fe586889b81443f9"),
      id: ObjectId("620253ddfe586889b81443fa"),
     _id. Objection ( 020233001630000 username: 'goodguygreg', title: 'steals your identity', body: 'raise your credit score
       _id: ObjectId("620253fdfe586889b81443fb"),
     _iu. Osjetu.
username: 'goodguygreg',
title: 'passes out at party',
body: 'wakes up early and clean house'
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.posts.find({})
```

```
mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase
        id: ObjectId("62025e01fe586889b8144407"),
      id: '1',
username: 'goodguygreg',
title: 'passes out at party',
body: 'wakes up early and clean house'
        id: ObjectId("62025e21fe586889b8144408"),
      id:
      id: 2,
username: 'goodguygreg',
title: 'steals your identity',
body: 'raise your credit score'
       _id: ObjectId("62025e3bfe586889b8144409"),
      īd
      username: 'goodguygreg',
title: 'reports a bug in your code',
body: 'sends you a pull request'
       _id: ObjectId("62025e57fe586889b814440a"),
      id:
      id: '4'
username: 'scumbagsteve',
title: 'borrows something',
body: 'sells it'
        id: ObjectId("62025e72fe586889b814440b"),
      id: '5',
username: 'scumbagsteve',
title: 'borrows everything',
body: 'the end'
        id: ObjectId("62025e90fe586889b814440c"),
      id:
      id: '6',
username: 'scumbagsteve',
title: 'forks your repo on github',
body: 'sets to private'
]
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> _
```

```
mongosh mongodb+srv://cluster0.chnhl.mongodb.net/myFirstDatabase
.
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.comments.find({})
      _id: ObjectId("620255d0fe586889b81443fc"),
    _id. Objection,
username: 'goodguygreg',
comment: 'hope you got a good deal!',
      _id: ObjectId("620255f9fe586889b81443fd"),
    username: 'goodguygreg',
comment: 'whats mine is yours!',
post: '2'
    _id: ObjectId("62025630fe586889b81443fe"),
username: 'goodguygreg',
comment: 'dont violate the licensing agreement!',
     post:
      _id: ObjectId("6202566afe586889b81443ff"),
    username: 'scumbagsteve',
comment: 'it still isnt clean',
post: '4'
      _id: ObjectId("620256b0fe586889b8144400"),
    username: 'scumbagsteve',
comment: 'denied your pr cause i found a hack',
 ttlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.comments.find({username:"goodguygreg"})
      id: ObjectId("620255d0fe586889b81443fc"),
     username: 'goodguygreg',
comment: 'hope you got a good deal!',
     post:
      _id: ObjectId("620255f9fe586889b81443fd"),
    username: 'goodguygreg', comment: 'whats mine is yours!', post: '2'
```

```
username: 'goodguygreg',
   comment: 'whats mine is yours!',
   post: '2'
},
{
   _id: ObjectId("62025630fe586889b81443fe"),
        username: 'goodguygreg',
        comment: 'dont violate the licensing agreement!',
   post: '3'
}
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> db.comments.find({username:"scumbagsteve"})
[
   _id: ObjectId("6202566afe586889b81443ff"),
        username: 'scumbagsteve',
        comment: 'it still isnt clean',
        post: '4'
},
[
   _id: ObjectId("620256b0fe586889b8144400"),
        username: 'scumbagsteve',
        comment: 'denied your pr cause i found a hack',
        post: '5'
}
Atlas atlas-8ak5qr-shard-0 [primary] myFirstDatabase> __
```