**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.

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

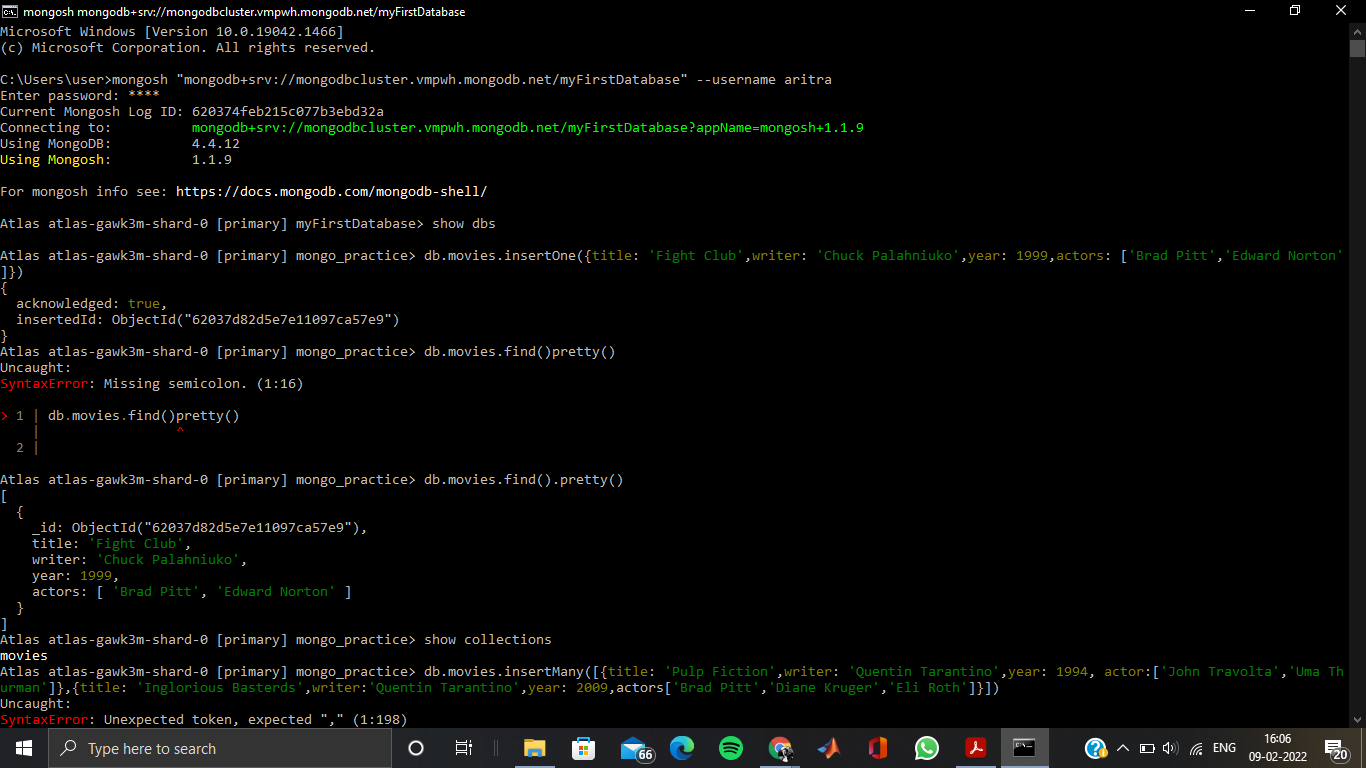
synopsis : Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness.

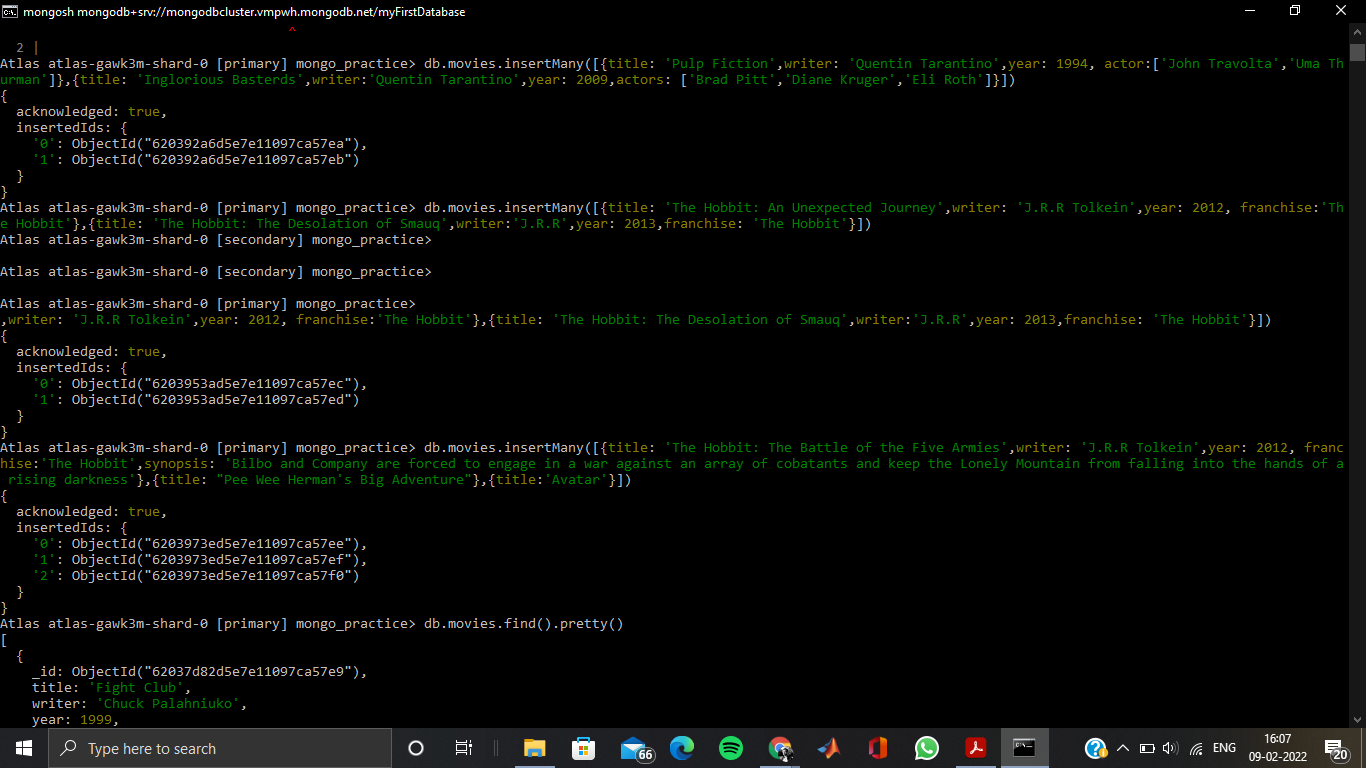
title : Pee Wee Herman's Big Adventure

title : Avatar

Reference

https://www.tutorialspoint.com/mongodb/mongodb\_insert\_document.htm

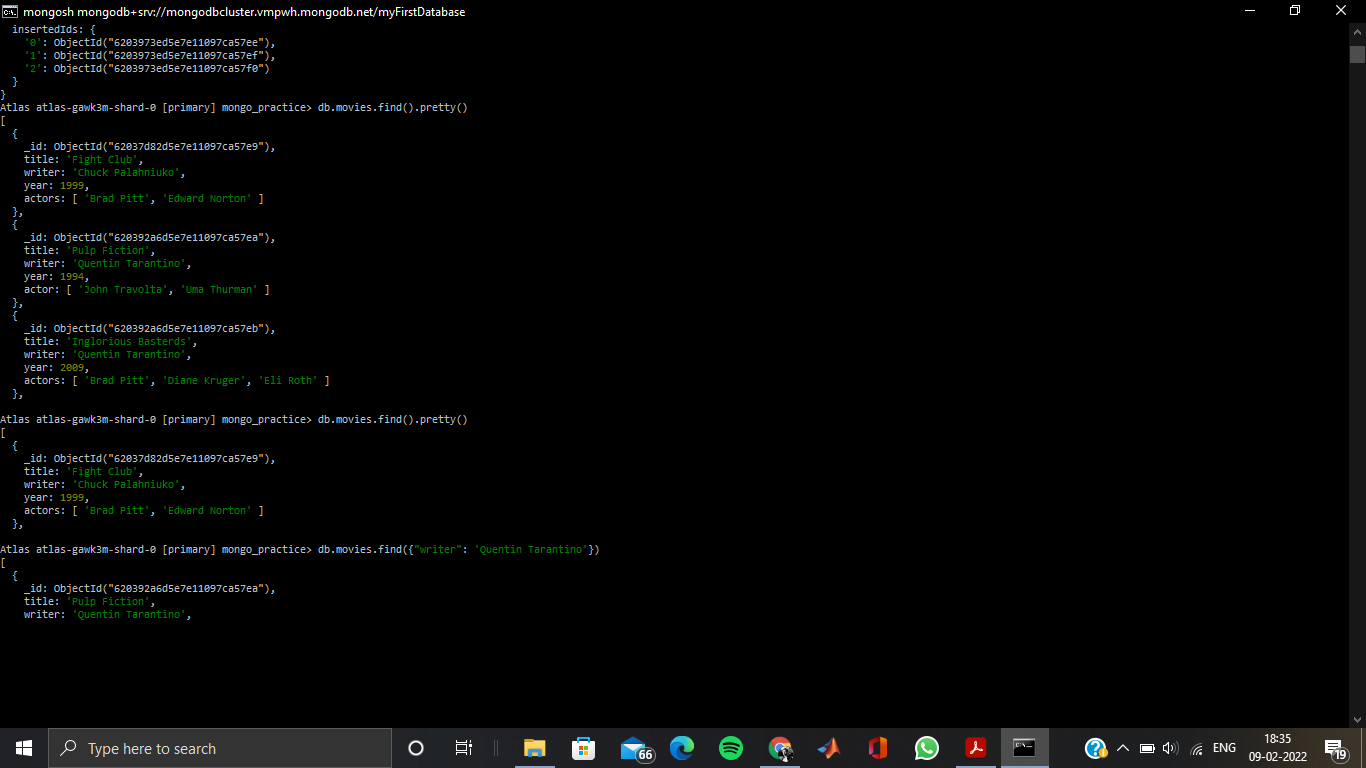




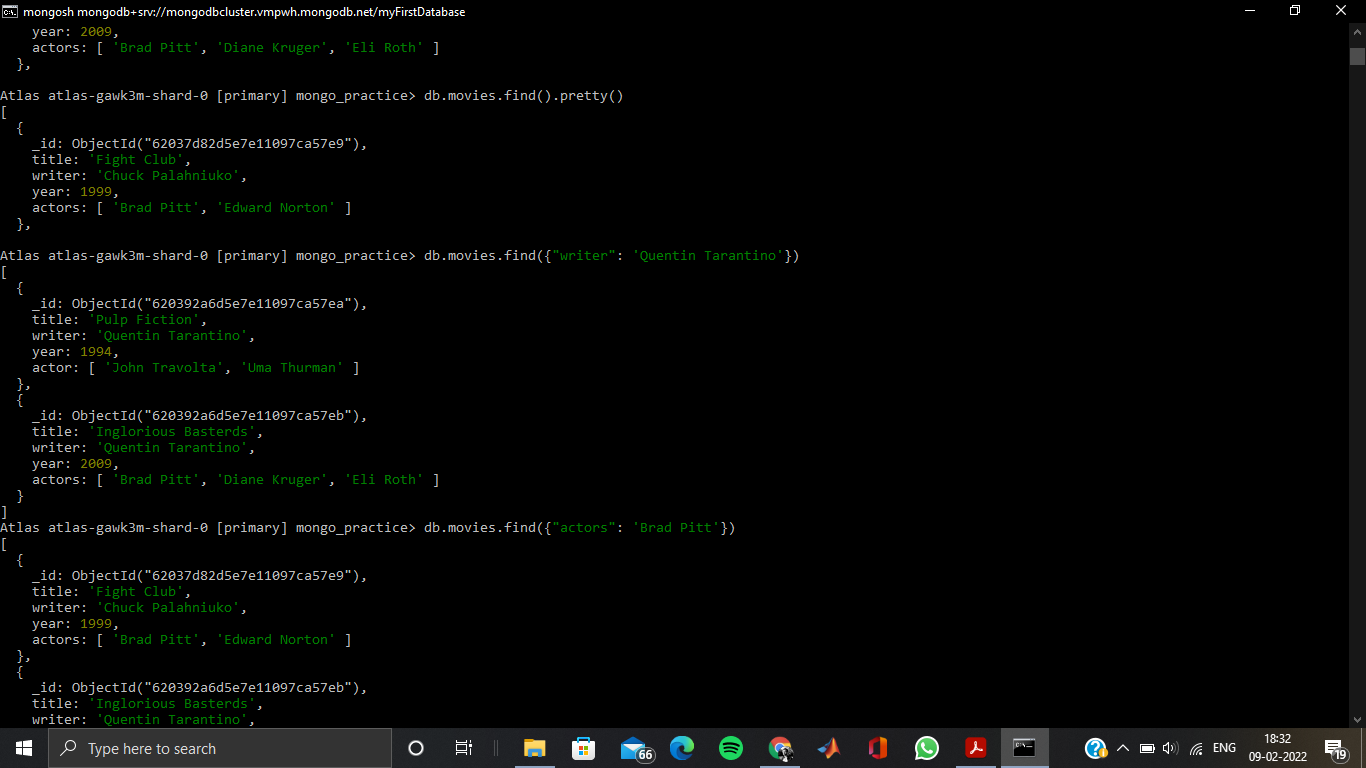
**Query / Find Documents**

query the **movies** collection to

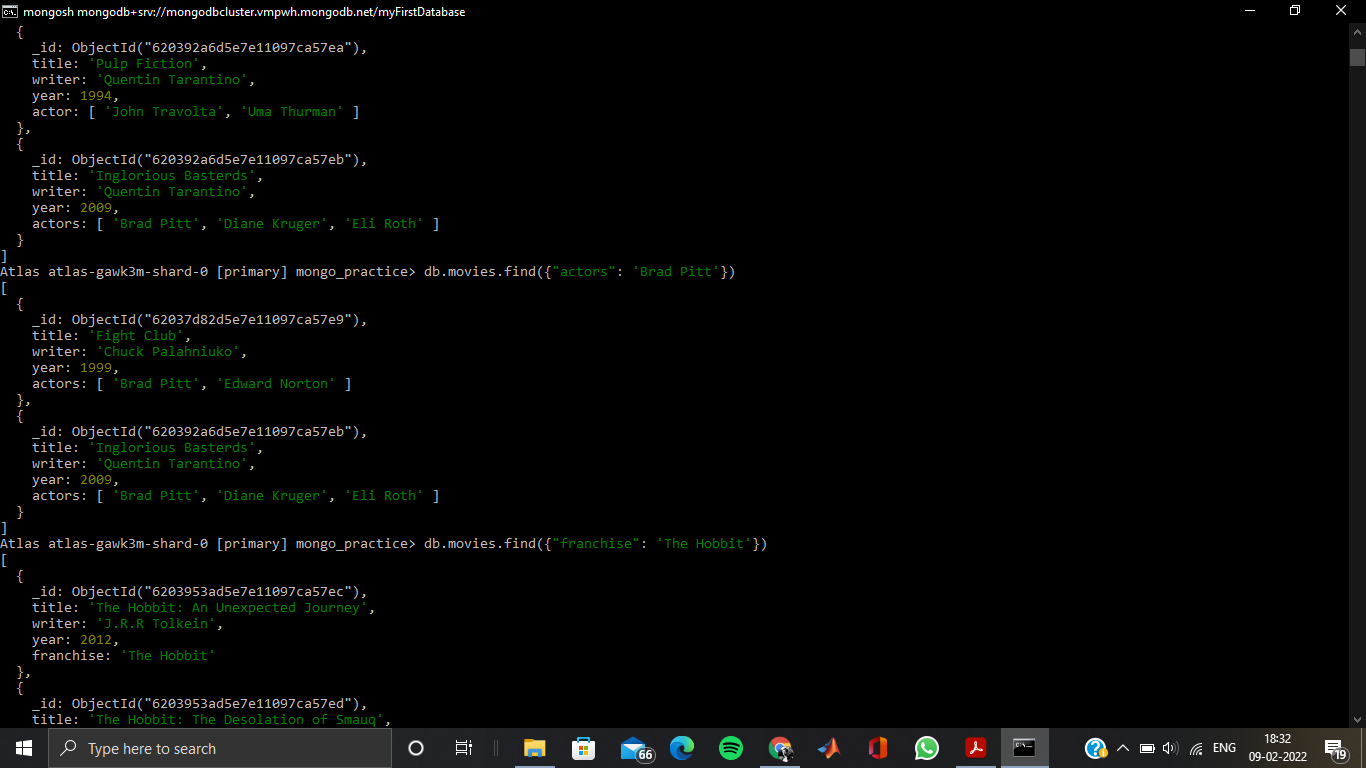
1. get all documents



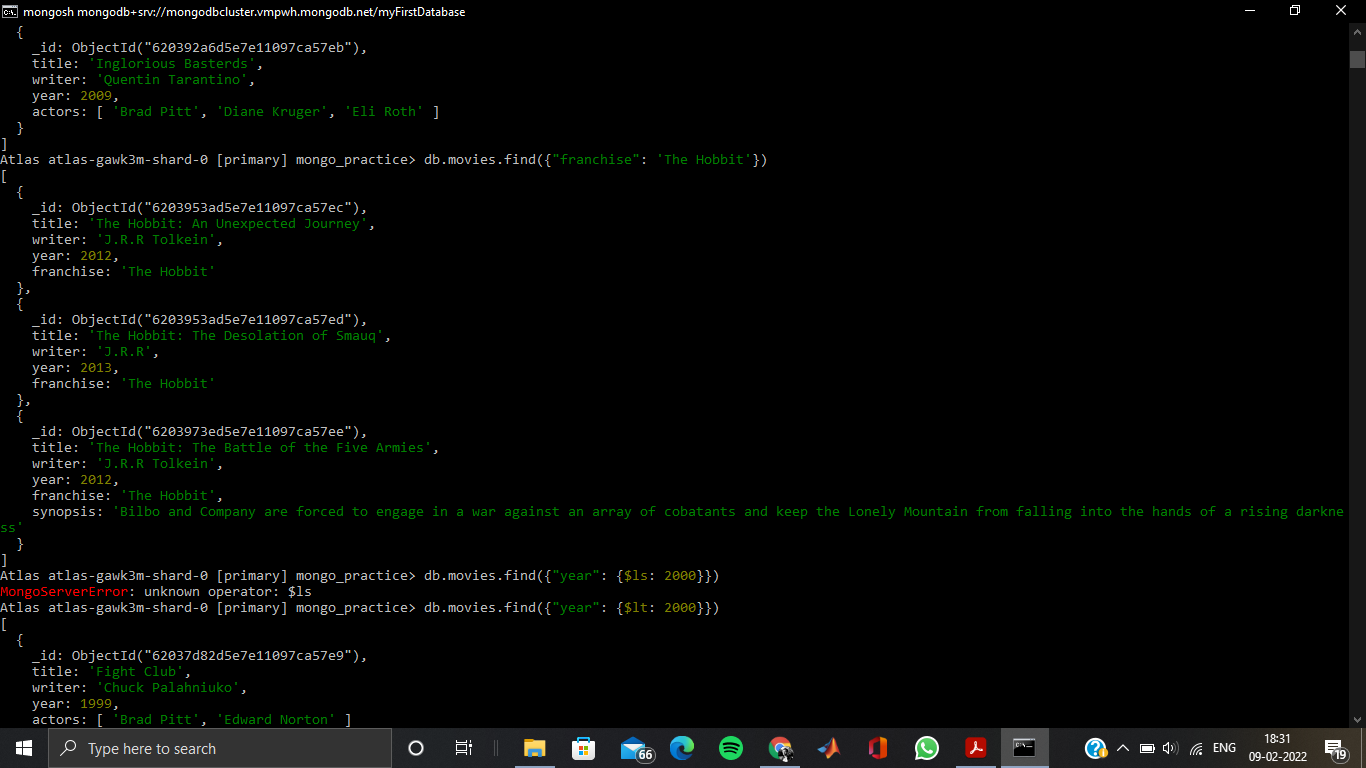
2. get all documents with writer set to "Quentin Tarantino"



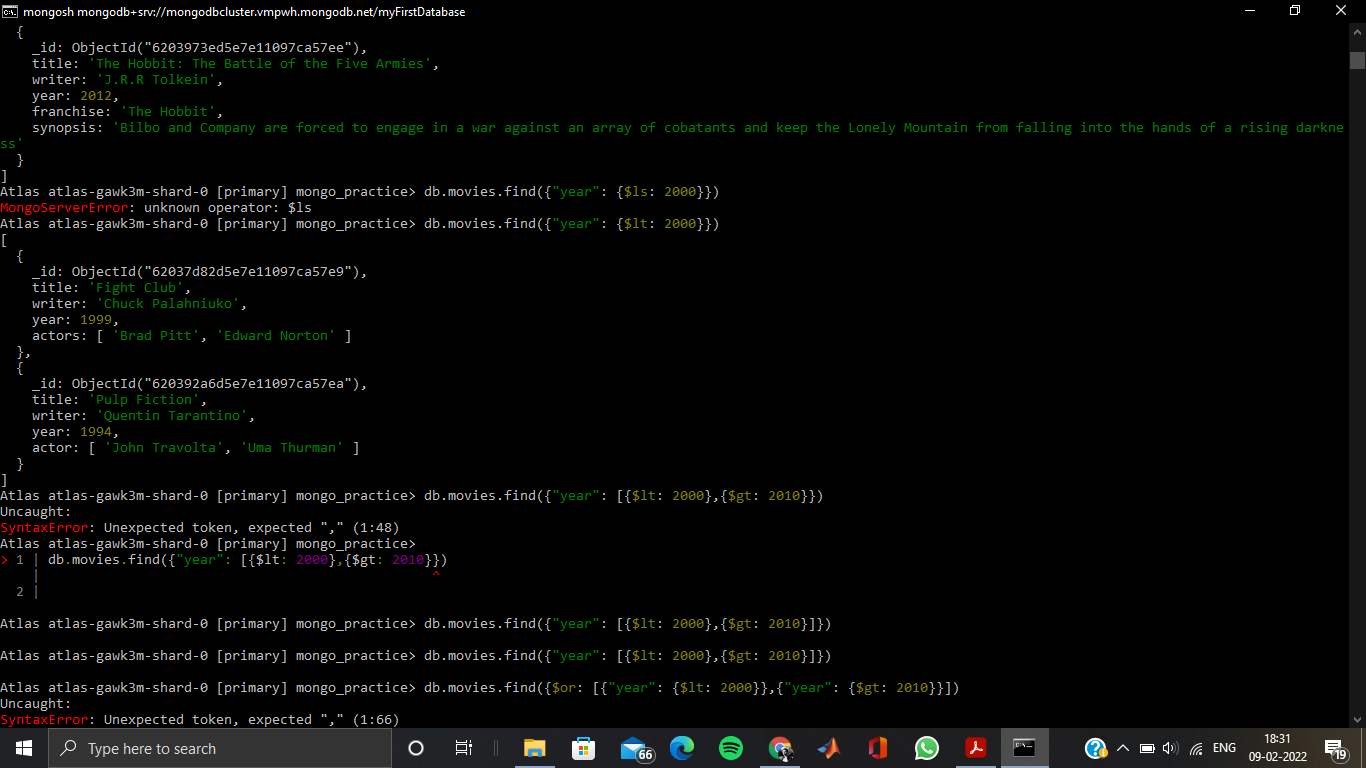
3. get all documents where actors include "Brad Pitt"



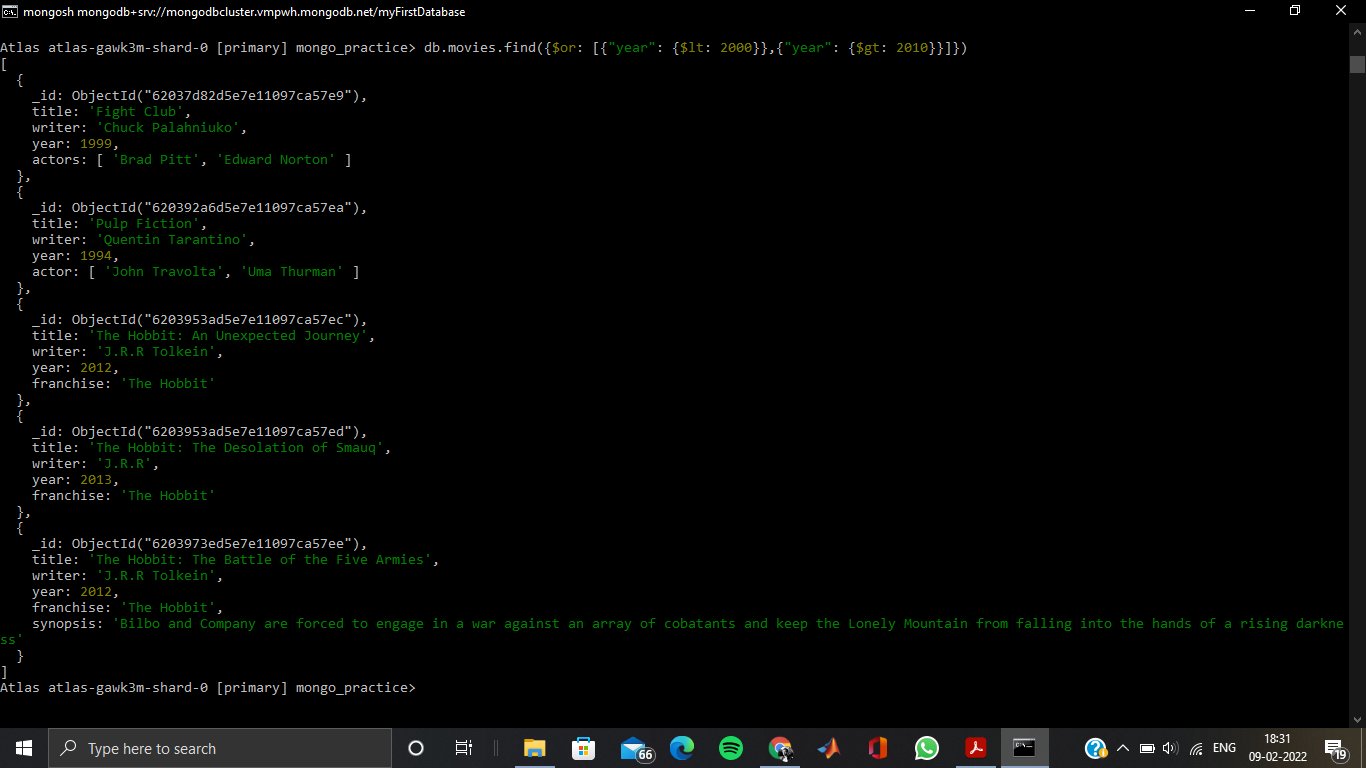
4. get all documents with franchise set to "The Hobbit"



5. get all movies released in the 90s



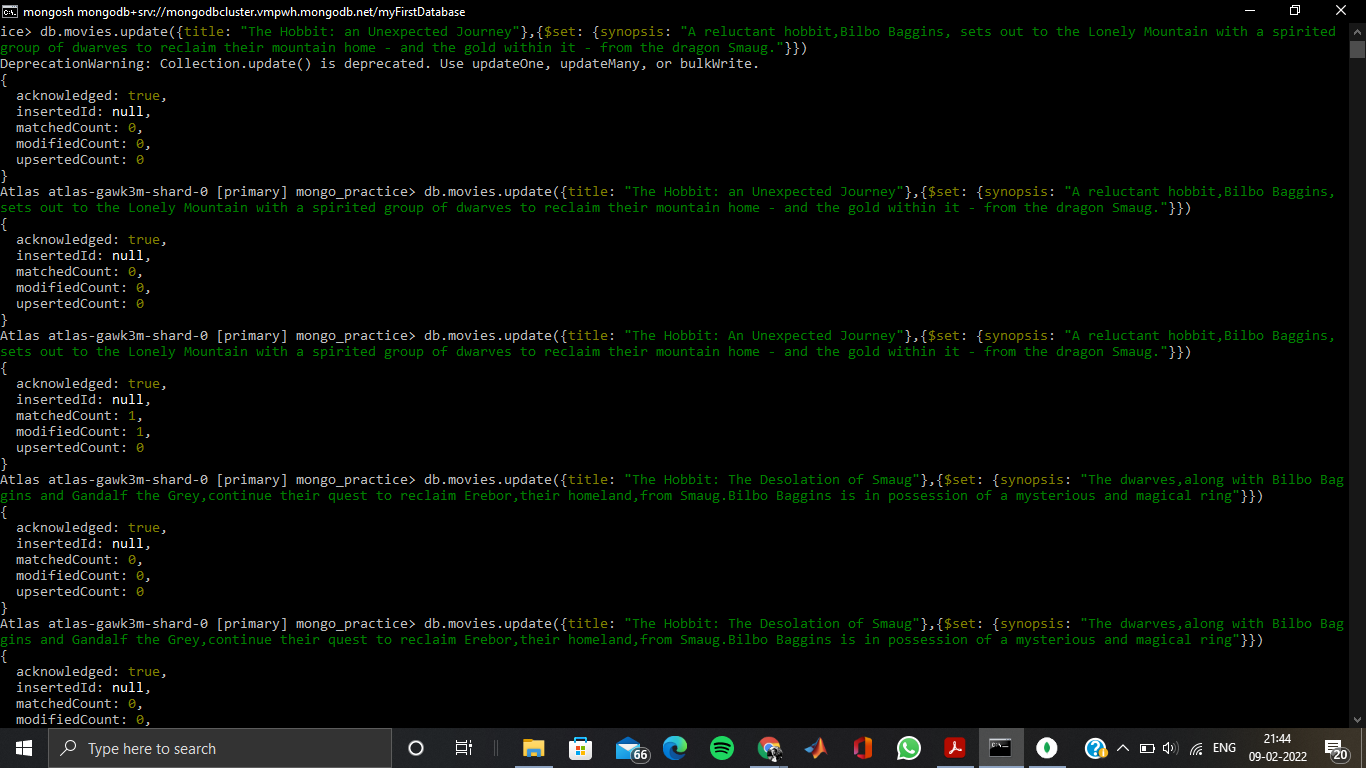
6. get all movies released before the year 2000 or after 2010



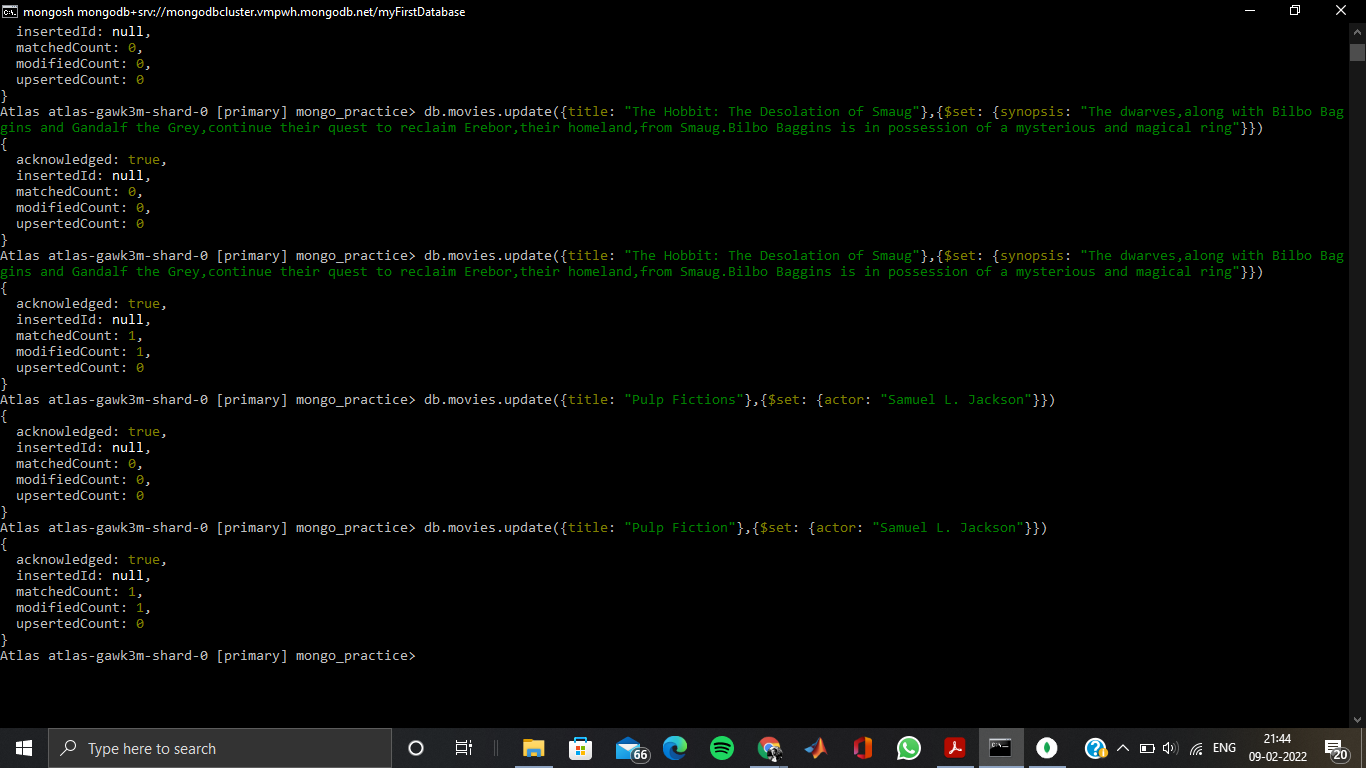
Reference: https://www.tutorialspoint.com/mongodb/mongodb\_query\_document.htm

**Update Documents**

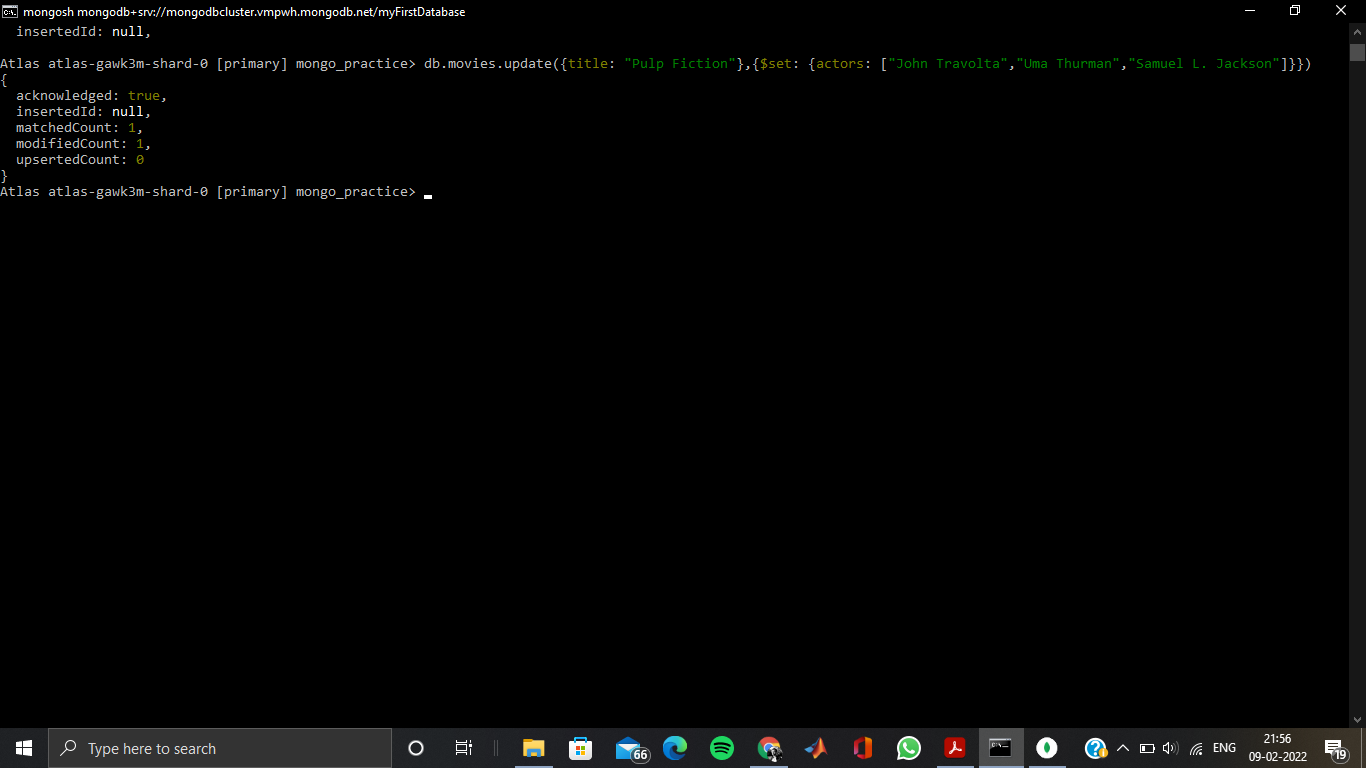
1. add a synopsis to "The Hobbit: An Unexpected Journey" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."



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."



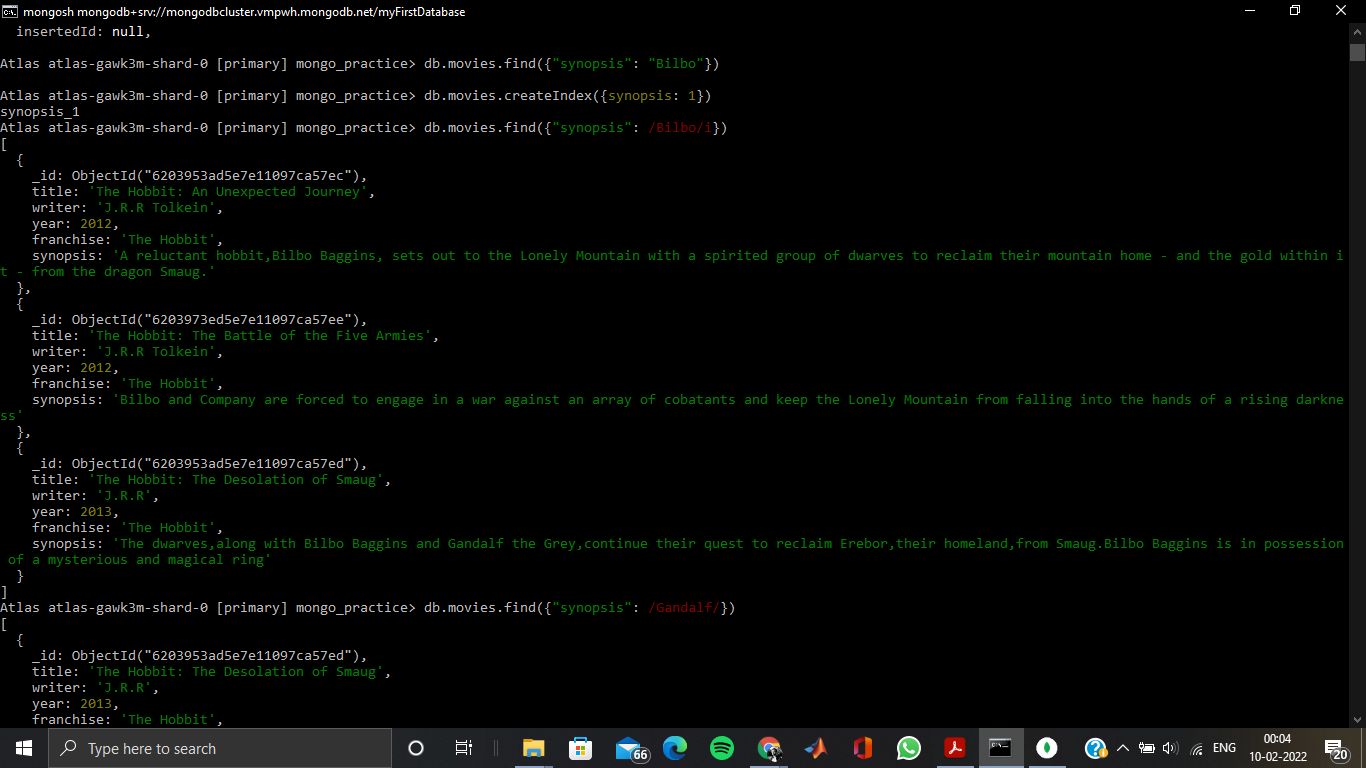
3. add an actor named "Samuel L. Jackson" to the movie "Pulp Fiction"



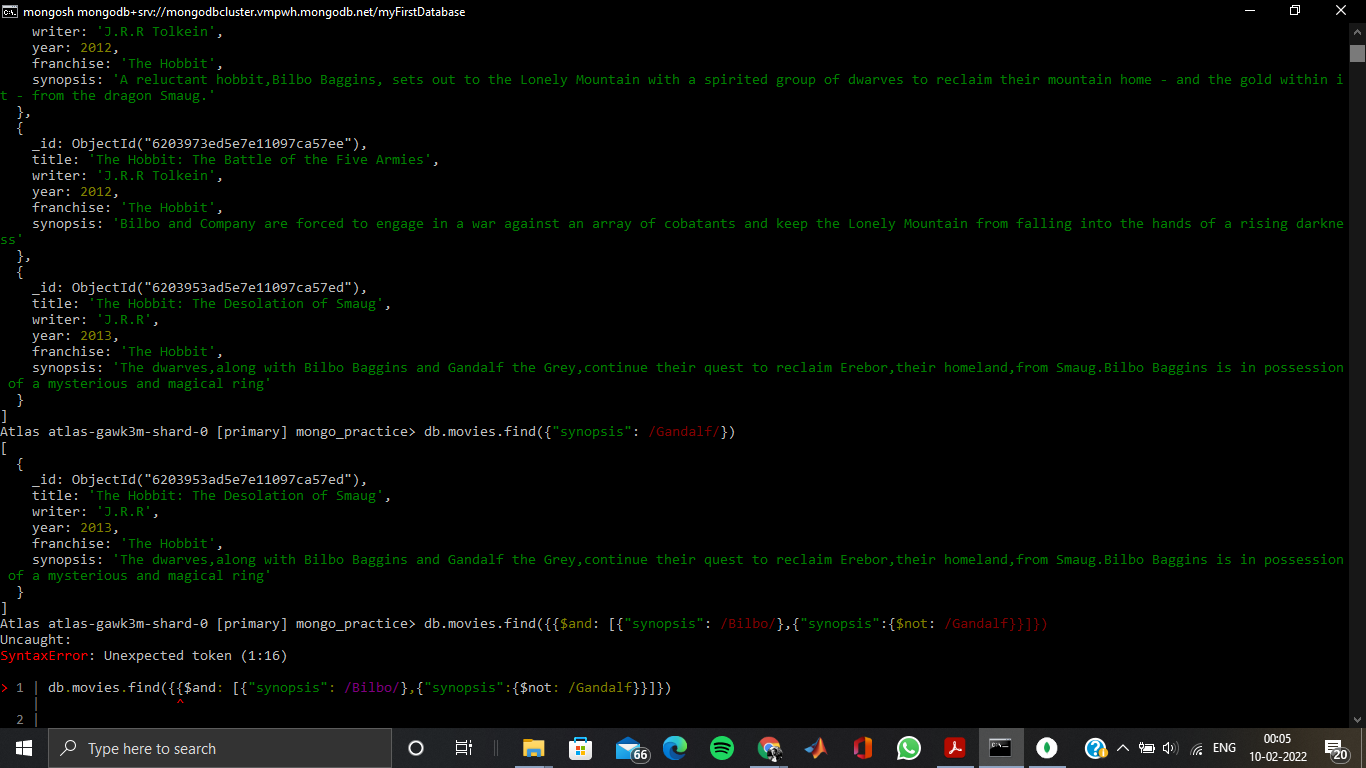
Reference: https://www.tutorialspoint.com/mongodb/mongodb\_update\_document.htm

**Text Search**

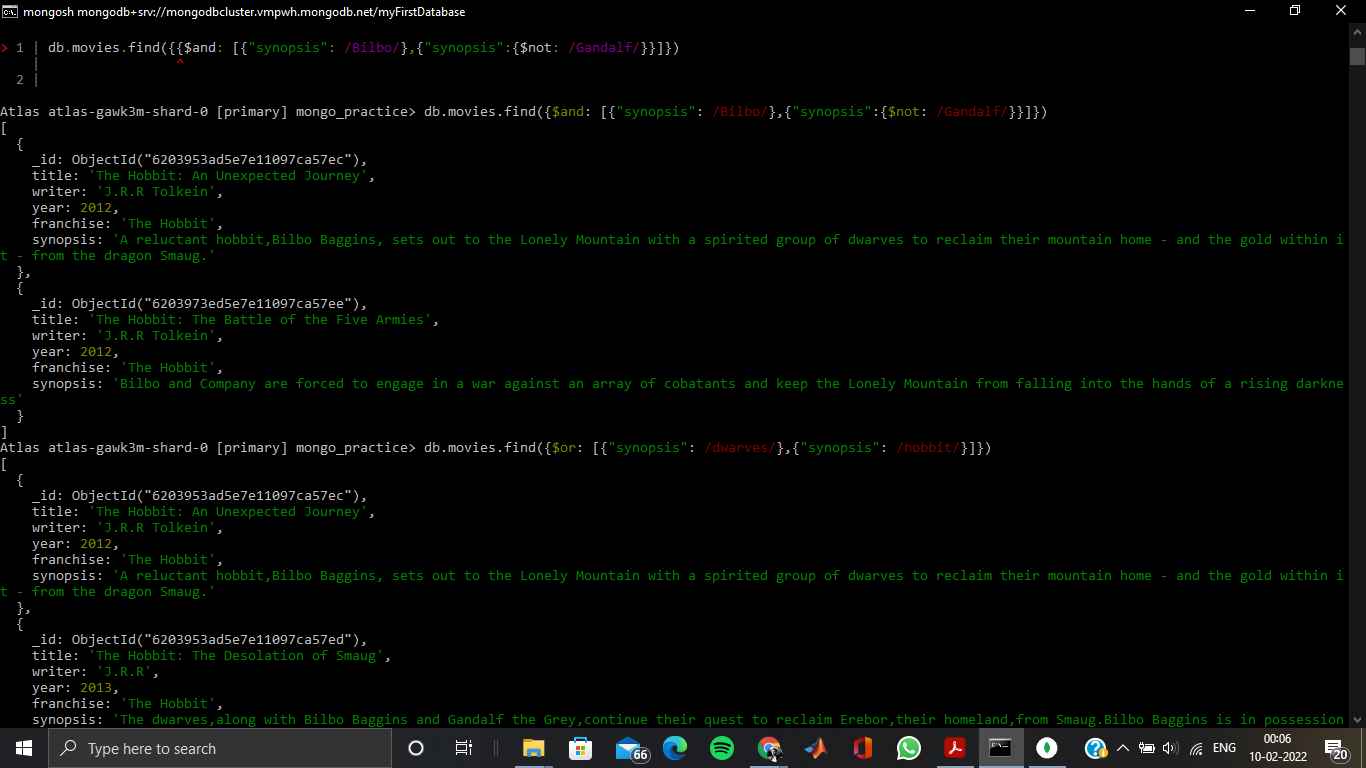
1. find all movies that have a synopsis that contains the word "Bilbo"



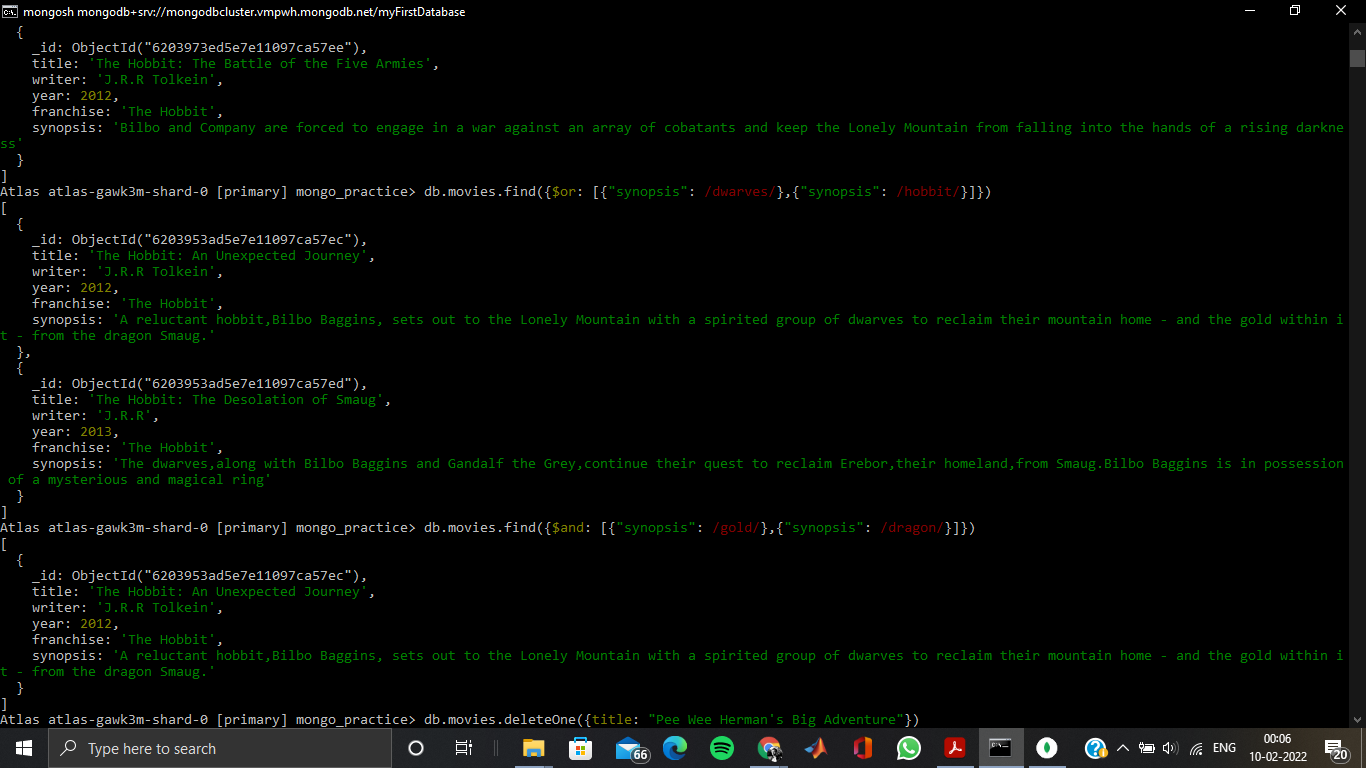
2. find all movies that have a synopsis that contains the word "Gandalf"



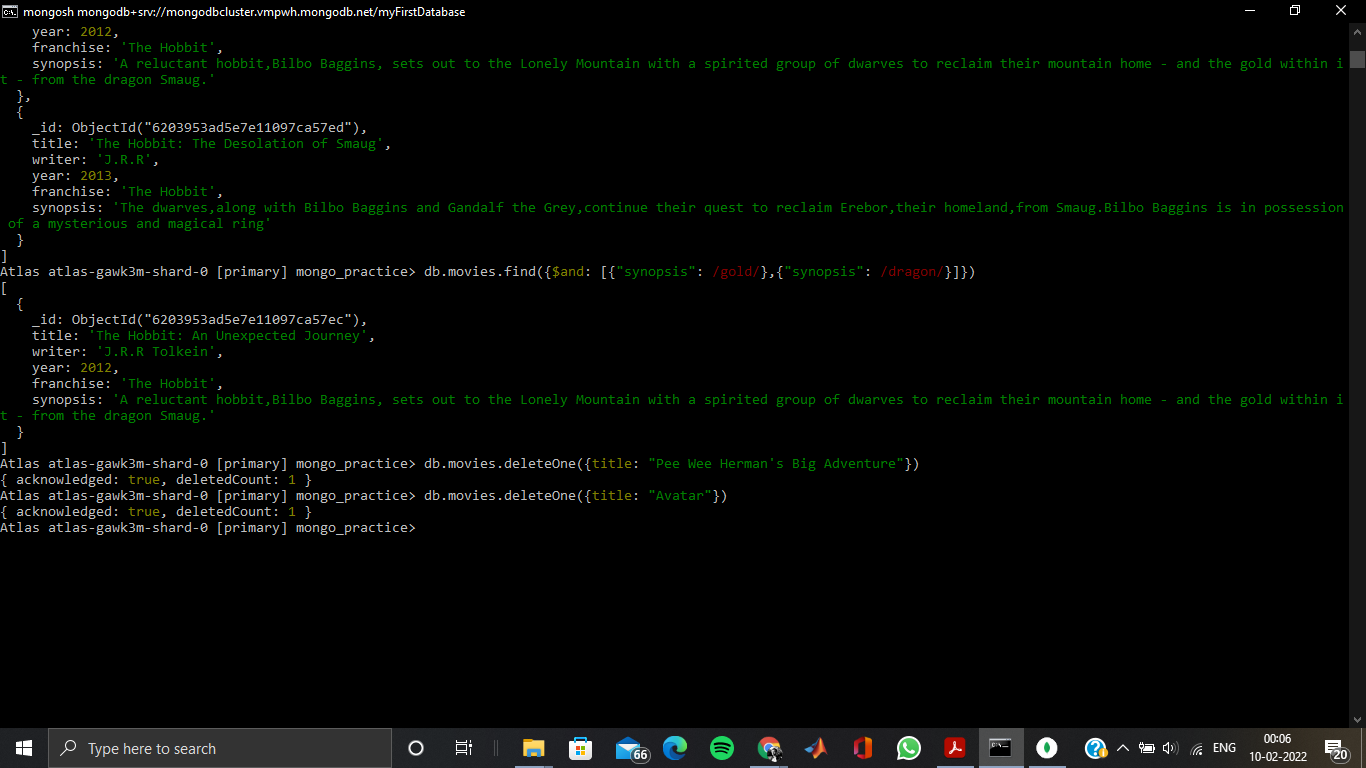
3. find all movies that have a synopsis that contains the word "Bilbo" and not the word "Gandalf"



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"

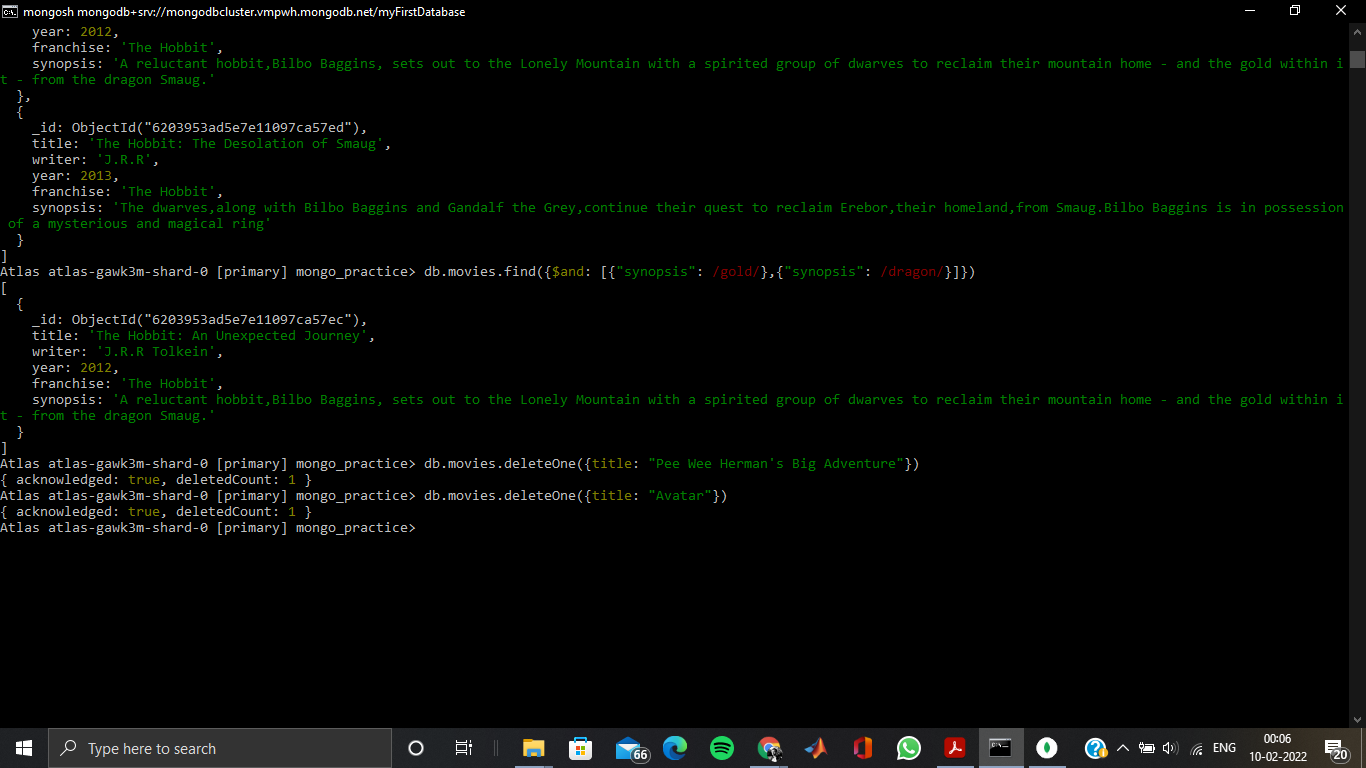


Reference: https://www.tutorialspoint.com/mongodb/mongodb\_text\_search.htm

**Delete Documents**

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

2. delete the movie "Avatar"



Reference: https://www.tutorialspoint.com/mongodb/mongodb\_delete\_document.htm

**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

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

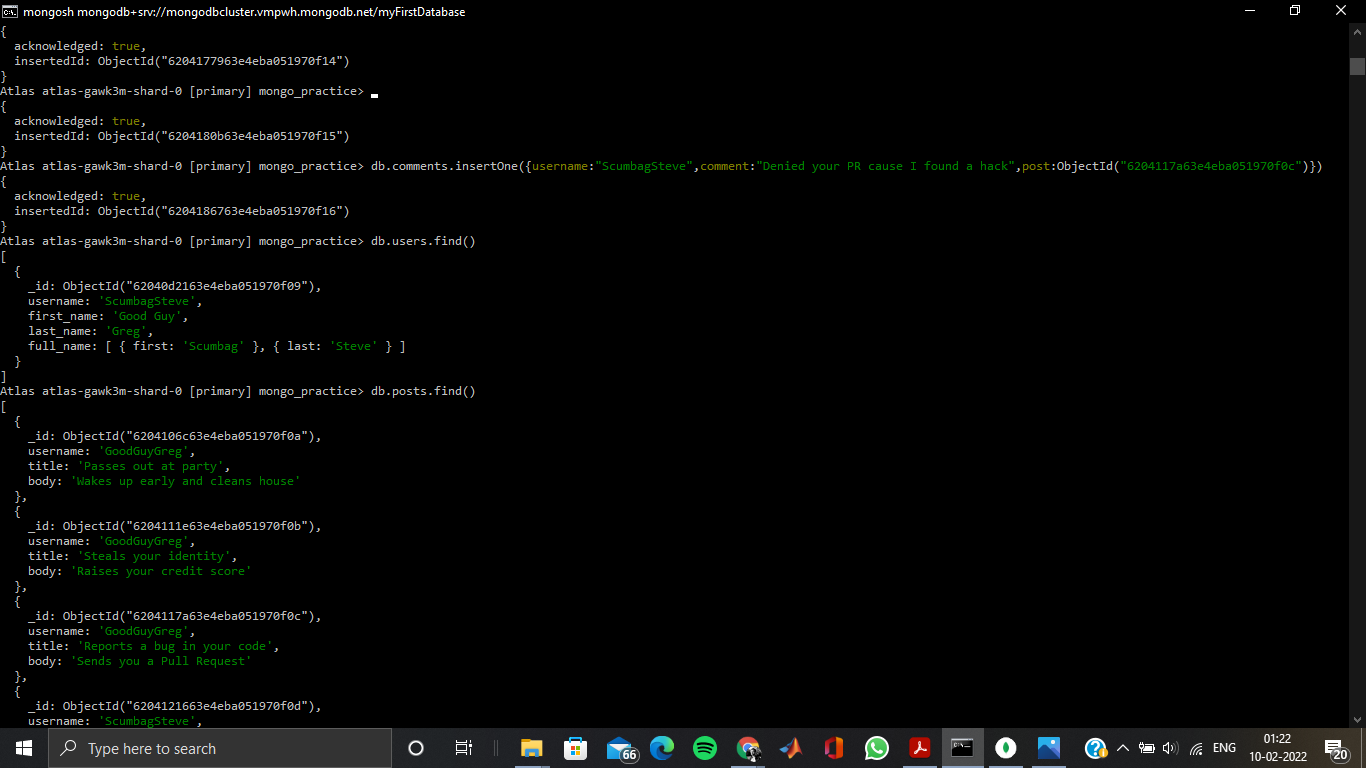
comment : Denied your PR cause I found a hack

post : [post\_obj\_id]

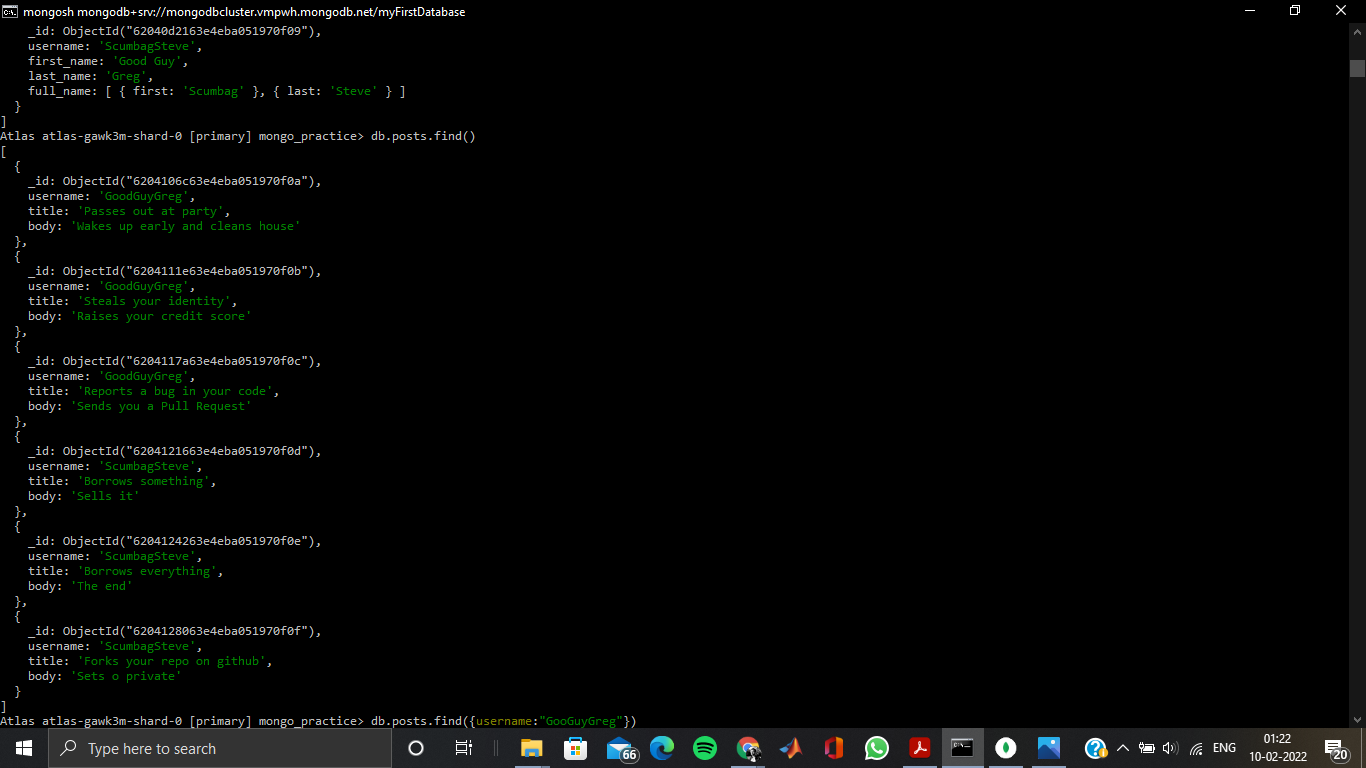
where [post\_obj\_id] is the ObjectId of the posts document: "Reports a bug in your code"

**Querying related collections**

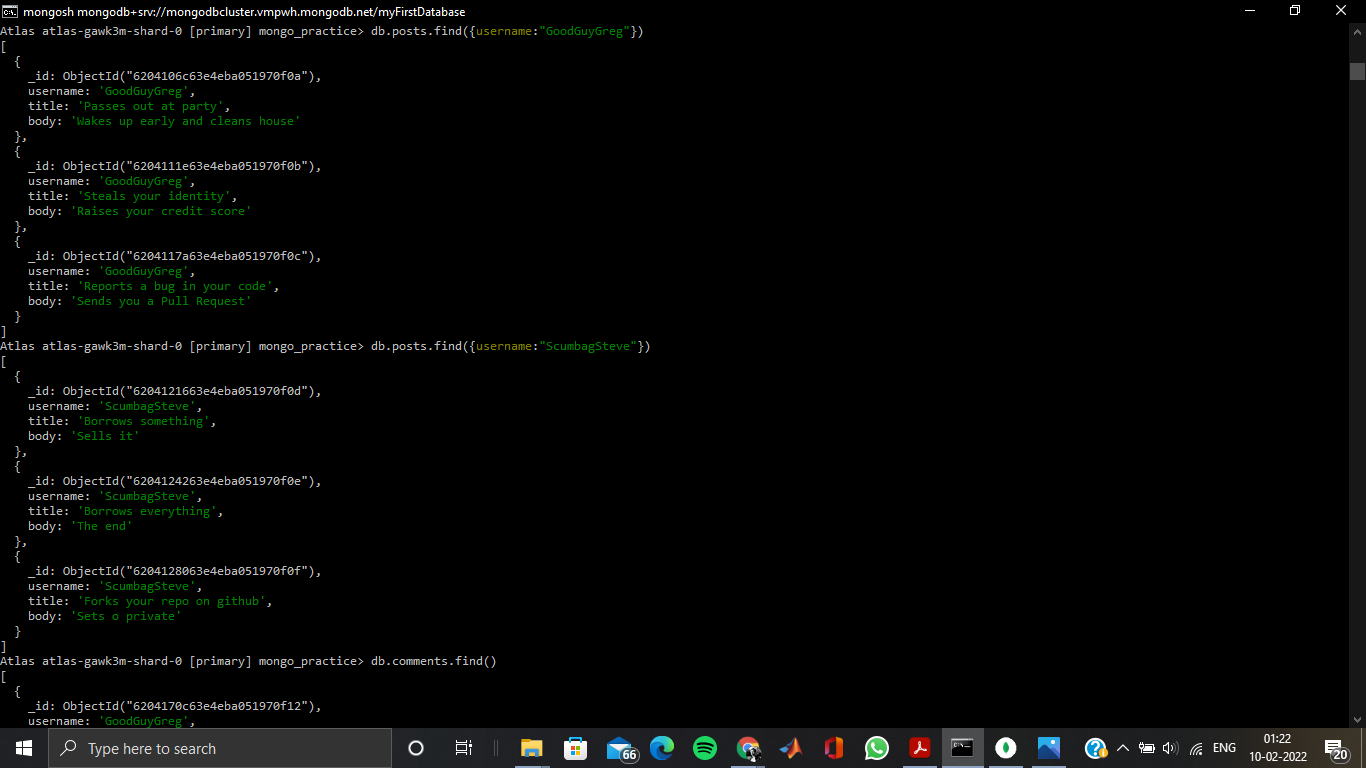
1. find all users



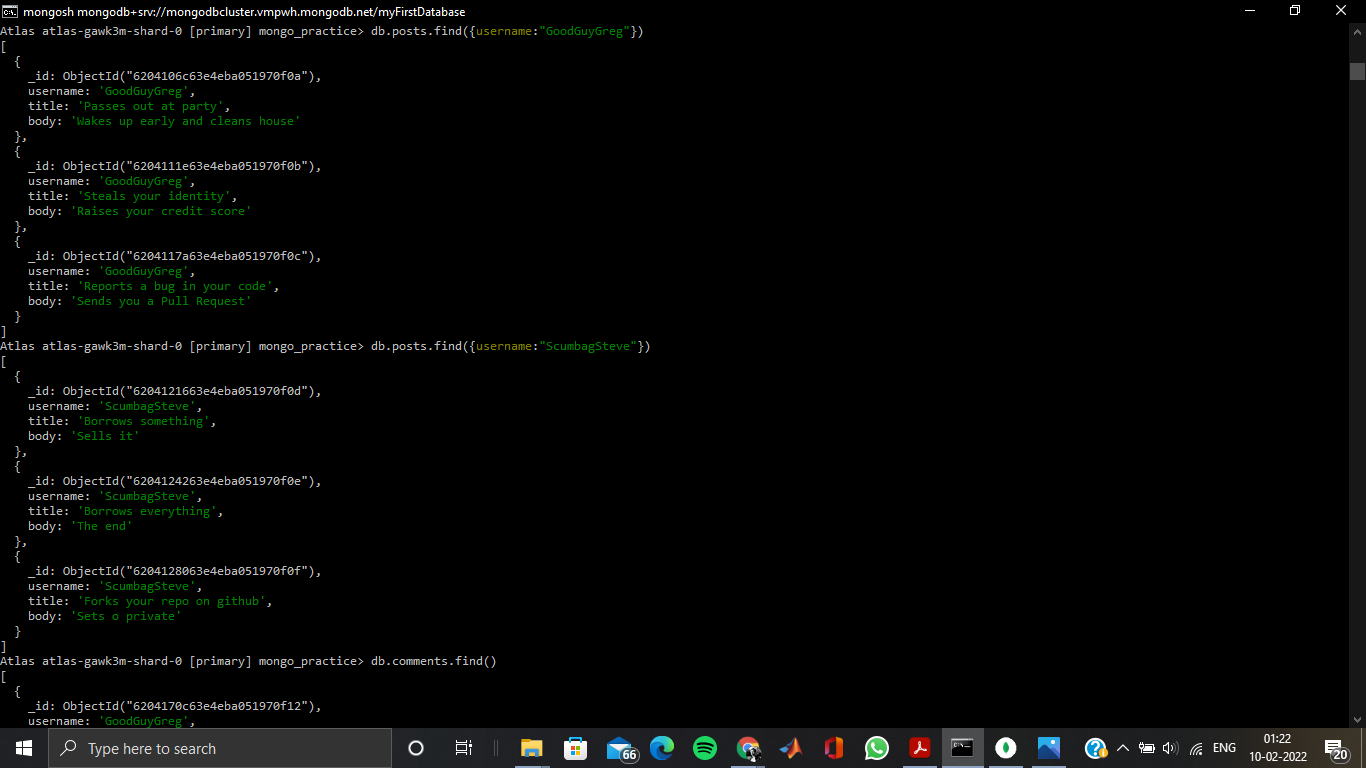
2. find all posts



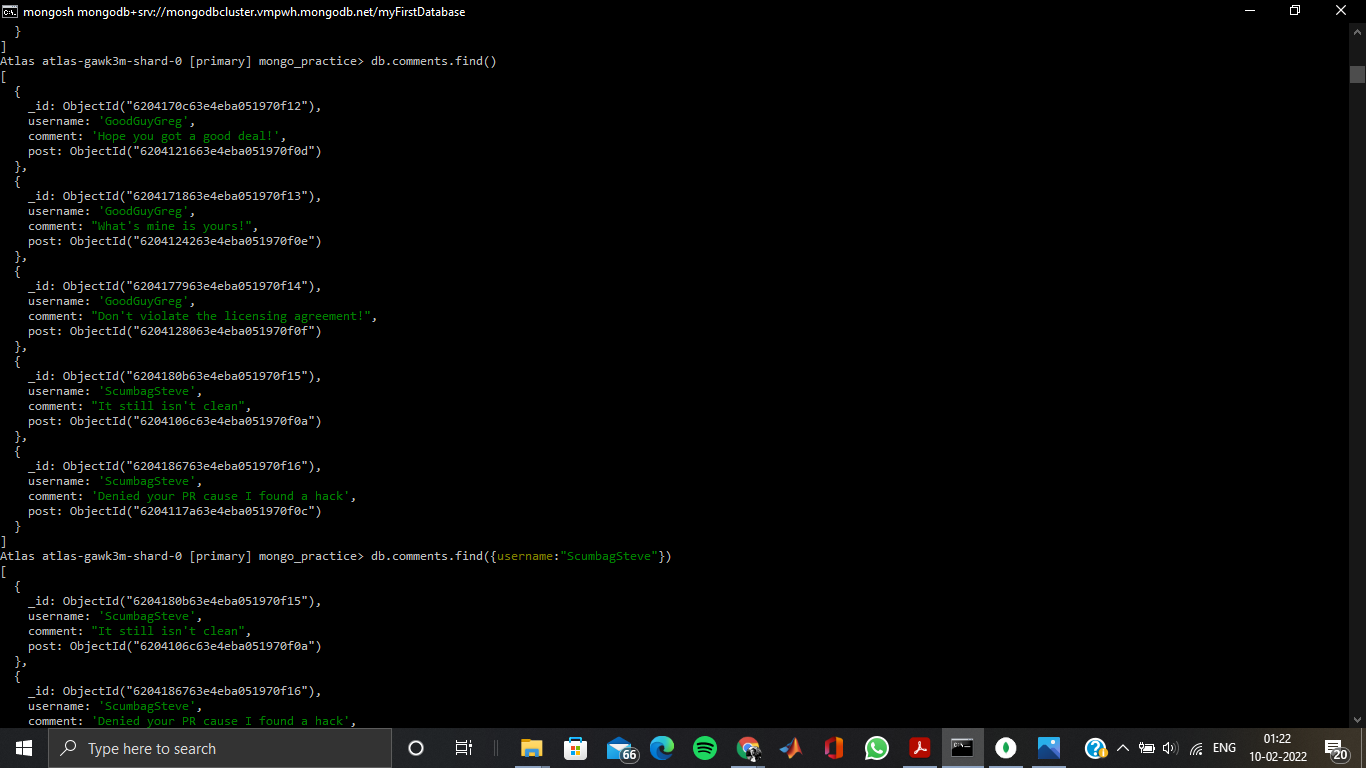
3. find all posts that was authored by "GoodGuyGreg"



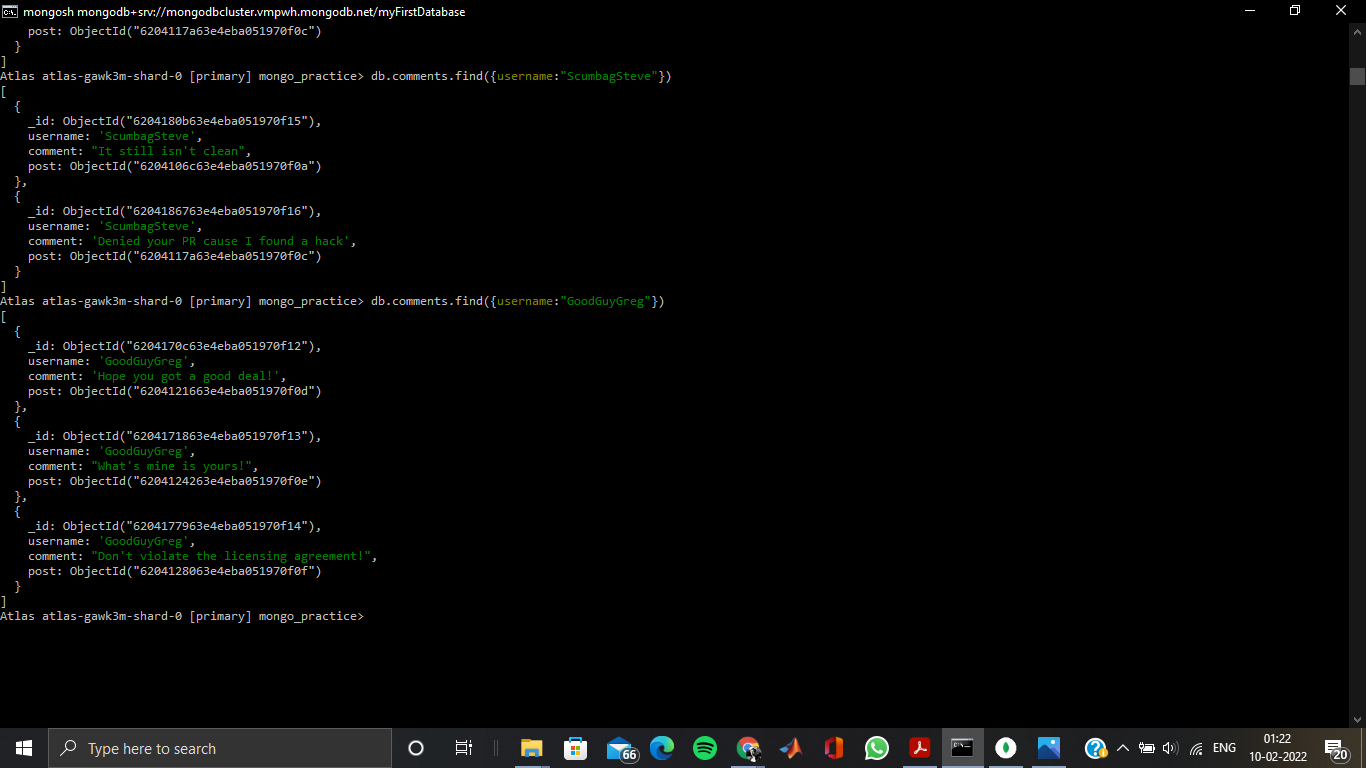
4. find all posts that was authored by "ScumbagSteve"



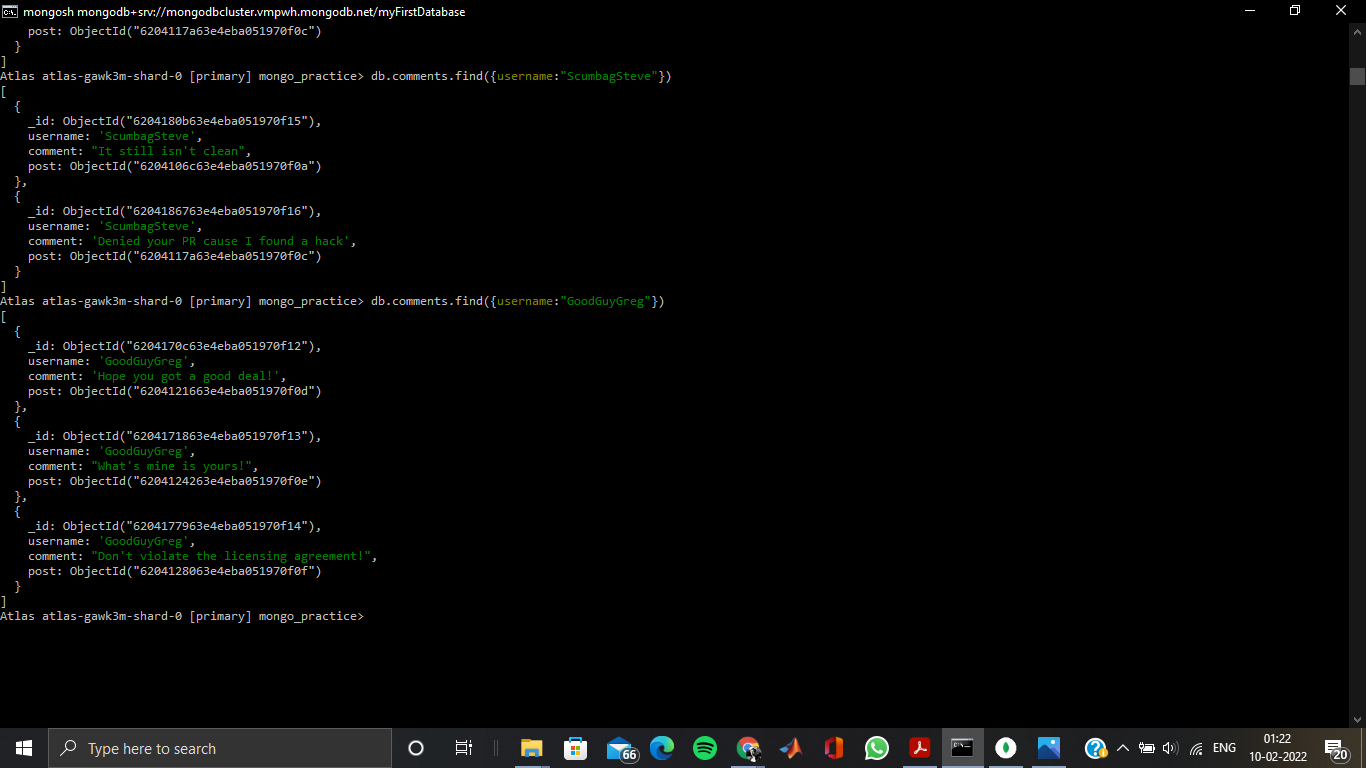
5. find all comments



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"

References: https://docs.mongodb.com/manual/reference/method/db.collection.find/

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