### Assignment 1

## Queries on Find Document

1

```
> show dbs

Movies 0.000GB
admin 0.000GB
config 0.000GB
local 0.000GB
test 0.000GB

> use mongo_practice
switched to db mongo_practice
> db.movies.insert(
... [
... {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 Habbit: An unexpected journey", writer:"J.R.R. Tolkein", year:"2012",franchise: "the Hobbit"}])
BulkWriteResult({
    "writeCroncernErrors" : [],
    "nInserted" : 0,
    "nMatched" : 0,
    "nMatched" : 0,
    "nModified" : 0,
    "nMemoved" : 0,
    "upserted" : []
})
```

2

# 3.Get All Documents

```
> db.movies.find()
{ "_id": ObjectId("6105917a93c64312fa146756"), "title": "Fight Club", "writer": "Chunk", "year": "1999", "actor": [ "Brad pitt", "Edward Norton"] }
{ "_id": ObjectId("6105917a93c64312fa146756"), "title": "Pulp Fiction", "writer": "Quentin Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman"] }
{ "_id': ObjectId("610637436dc2f82b3f12772"), "title": "The Nabbit: An unexpected journey", "writer": "J.R.R. Tolkein", "year": "2002", "franchise": "the Nabbit" }
{ "_id': ObjectId("61064221759b85588a7c20"), "title": "Inglorious Basteds", "writer": "Quentin Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth"] }
{ "_id': ObjectId("61064221759b85588a7c21"), "title": "The Nabbit: An Unexpected Journey", "writer": "J.R.R. Tolkein", "year": "2012", Franchise": "The Nabbit" }
{ "_id': ObjectId("61064221759b85588a7c27"), "title": "The Nabbit: The Desulation of Smaug", "writer": "J.R.R. Tolkein", "year": "2013", "franchise": "The Hobbit" }
{ "_id': ObjectId("61064221759b85588a7c23"), "title": "The Hobbit: The Desulation of Smaug", "writer": "J.R.R. Tolkein', "year": "2013", "franchise": "The Hobbit" }
{ "_id': ObjectId("61064221759b8558a7c23"), "title": "The Hobbit: The Desulation of Smaug", "writer": "J.R.R. Tolkein', "year": "2013", "franchise": "The Hobbit" }
{ "_id': ObjectId("61064221759b8558a7c23"), "title": "The Hobbit: The Desulation of Smaug", "writer": "J.R.R. Tolkein', "year": "2012", "franchise": "The Hobbit", "synopsis": "Biblo and of Grade to engage in a war against an array of combatants and keep the lonely Mountain from failing into the hands of a rising darkness." }
{ "_id': ObjectId("61064221759b8558a7c25"), "title": "Pae Wee Herman's Big Adventure" }
{ "_id': ObjectId("61064221759b8558a7c25"), "title": "Avatar" }
}
```

```
> db.movies.find({writer: 'Quentin Tarantino'})
{ "_id": ObjectId("610637436dc2f82b3f127272"), "title": "Pulp Fiction", "writer": "Quentin Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] }
{ "_id": ObjectId("61064221759b8b5a588a7c20"), "title": "Inglorious Basterds", "writer": "Quentin Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }
>
```

```
> db.movies.find({actors:"Brad Pitt"})
{ "_id" : ObjectId("61064221759b8b5a588a7c20"), "title" : "Inglorious Basterds", "writer" : "Quentin Tarantino", "year"
: "2009", "actors" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }
>
```

6.

```
> db.movies.find({franchise: "The Hobbit"}).pretty()
{
        "_id" : ObjectId("61064221759b8b5a588a7c22"),
        "title" : "The Hobbit: The Desaulation of Smaug",
        "writer" : "J.R.R.Tolkein",
        "year" : "2013",
        "franchise" : "The Hobbit"
}
{
        "_id" : ObjectId("61064221759b8b5a588a7c23"),
        "title" : "The Hobbit:The battle of the five armies",
        "writer" : "J.R.R.Tolkein",
        "year" : "2012",
        "franchise" : "The Hobbit",
        "synopsis" : "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from failing into the hands of a rising darkness."
}
```

```
db.movies.find({year:{$gt:"1990", $lt:"2000"}}).pretty()
      "_id" : ObjectId("6105917a93c64312fa146756"),
      "title" : "Fight Club",
      "writer" : "Chunk",
      "year": "1999",
      "actor" : [
              "Brad pitt",
              "Edward Norton"
      "_id" : ObjectId("610637436dc2f82b3f127272"),
      "title" : "Pulp Fiction",
      "writer" : "Quentin Tarantino",
      "year" : "1994",
      "actors" : [
              "John Travolta",
              "Uma Thurman"
      ]
```

```
db.movies.find({$or:[{year:{$gt:"2010"}},{year: {$lt:"2000"}}]}).pretty()
         " id" : ObjectId("6105917a93c64312fa146756"),
         "title" : "Fight Club",
"writer" : "Chunk",
         "year" : "1999",
         "year": [
"actor" : [
"Brad pitt",
                                                       "Edward Norton"
         "_id" : ObjectId("610637436dc2f82b3f127272"),
         "title" : "Pulp Fiction",
"writer" : "Quentin Tarantino",
         "year" : "1994",
"actors" : [
                    "John Travolta",
                    "Uma Thurman"
         __id" : ObjectId("61063a4c6dc2f82b3f12727a"),
         "title": "The Habbit: An unexpected journey",
"writer": "J.R.R. Tolkein",
"year": "2012",
"franchise": "the Hobbit"
         " id" : ObjectId("61064221759b8b5a588a7c22"),
         "title": "The Hobbit: The Desaulation of Smaug",
"writer": "J.R.R.Tolkein",
"year": "2013",
"franchise": "The Hobbit"
         "_id" : ObjectId("61064221759b8b5a588a7c23"),
         "title": "The Hobbit: The battle of the five armies", "writer": "J.R.R.Tolkein",
         "year" : "2012",
"franchise" : "The Hobbit",
"synopsis" : "Biblo and company are forced to engage in a war against an array of
keep the lonely Mountain from failing into the hands of a rising darkness."
```

# **Update Documents**

1

```
> db.movies.update({_id:ObjectId("61064221759b8b5a588a7c22")}, {$set:{synopsis:"The dwarves, along with Bilbo Baggins an
d Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession o
f a mysterious and magical ring."}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```

```
> db.movies.update({_id:ObjectId("610637436dc2f82b3f127272")}, {$push:{actors:"Samuel L. Jackson"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.movies.find({title:"Pulp Fiction"}
```

3.

**Deleting documents** 

```
> db.movies.remove({_id:ObjectId("61064221759b8b5a588a7c24")})
WriteResult({ "nRemoved" : 1 })
> db.movies.find(title:"Pee Wee Herman's Big Adventure").pretty()
uncaught exception: SyntaxError: missing ) after argument list :
@(shell):1:20
b db.movies.find({title:"Pee Wee Herman's Big Adventure"}).pretty()
  db.movies.find().pretty()
           "_id" : ObjectId("6105917a93c64312fa146756"),
           "title": "Fight Club",
"writer": "Chunk",
"year": "1999",
"actor": [
                     "Brad pitt",
                      "Edward Norton"
           "_id" : ObjectId("610637436dc2f82b3f127272"),
           "title" : "Pulp Fiction",
"writer" : "Quentin Tarantino",
           "year" : "1994",
"actors" : [
"John Travolta",
                      "Uma Thurman",
"Samuel L. Jackson"
           "_id" : ObjectId("61063a4c6dc2f82b3f12727a"),
"title" : "The Habbit: 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 spirite group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."
           "_id" : ObjectId("61064221759b8b5a588a7c20"),
```

```
> db.movies.remove({_id:ObjectId("61064221759b8b5a588a7c25")})
WriteResult({ "nRemoved" : 1 })
> db.movies.find().pretty()
```

#### **Text Search**

1

```
> db.movies.find({synopsis:{$regex:"Bilbo"}}).pretty()
{
        "_id" : ObjectId("61063a4c6dc2f82b3f12727a"),
        "title" : "The Habbit: 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("61064221759b8b5a588a7c22"),
        "title" : "The Hobbit: The Desaulation of Smaug",
        "writer" : "J.R.R.Tolkein",
        "year" : "2013",
        "franchise" : "The Hobbit",
        "synopsis" : "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 a mysterious and magical ring."
}
```

2.

```
odb.movies.find([$and:[{synopsis:($regex:"Bilbo"}), {synopsis:($foot:/Gandalf/)}]])
(*_id': ObjectId('Gi06)adc6dc/f2623512272n'), 'title': "The Habbit: An unexpected journey", "writer": "J.R.R. Tolkein", "year": "2012", "franchise": "the Hobbit", "synopsis": "A reluctant hobbit, Bilb ggins, sets out to the Lonely Wountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug." }

objectId('Gi06)adc6dc/f2623612727a"), (synopsis:($not:/Gandalf/)]]).pretty()

"itile": "The Habbit: An unexpected journey",
"wister": "J.R.R. Tolkein",
"year": "Melbot:",
"franchise": "Dis.R. Tolkein",
"year": "Melbot:",
"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."
```

```
> db.movies.find({$and:[{synopsis:{$regex:"Bilbo"}}, {synopsis:{$not:/Gandalf/}}]}).pretty()
{
        "_id" : ObjectId("61063a4c6dc2f82b3f12727a"),
        "title" : "The Habbit: An unexpected journey",
        "writer" : "J.R.R. Tolkein",
        "year" : "2012",
        "franchise" : "the Hobbit",
        "synopsis" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."
} db.movies.find({$or:[{synopsis:{$regex:"dwarves"}}}, {synopsis:{$regex:"hobbit"}}]}).pretty()
{
        "_id" : ObjectId("61063a4c6dc2f82b3f12727a"),
        "title" : "The Habbit: 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("61064221759b8b5a588a7c22"),
        "title" : "The Hobbit: The Desaulation of Smaug",
        "writer" : "J.R.R.Tolkein",
        "year" : "2013",
        "franchise" : "The Hobbit: The Desaulation 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 a mysterious and magical ring."
}
```

```
> db.movies.find({$and:[{synopsis:{$regex:"gold"}}, {synopsis:{$regex:"dragon"}}]}).pretty()
{
        "_id" : ObjectId("61063a4c6dc2f82b3f12727a"),
        "title" : "The Habbit: 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."
}
```

## Relationships

1.

```
> db.posts.find().pretty()
          "_id" : ObjectId("61066e04d7dfed5b5c713e9f"),
          "username" : "GoodGuyGreg",
"title" : "Passes out at Party",
"body" : "Raises your credit score"
          "_id" : ObjectId("61066ea09dd09bc384f5166a"),
          "username" : "GoodGuyGreg",
"title" : "Steals your identity",
          "body" : "Raises your credit score"
          "_id" : ObjectId("61066ec59dd09bc384f5166b"),
          "username" : "GoodGuyGreg",
"title" : "Reports a bug in your code",
"body" : "Sends you a pull request"
          "_id" : ObjectId("61066ed19dd09bc384f5166c"),
          "username": "ScumbagSteve",
"title": "Borrows something",
          "body" : "Sells it"
          "_id" : ObjectId("61066edd9dd09bc384f5166d"),
          "username" : "ScumbagSteve",
"title" : "Borrows everything",
"body" : "The end"
          "_id" : ObjectId("61066eea9dd09bc384f5166e"),
          "username" : "ScumbagSteve",
          "title" : "Forks your repo on github",
          "body" : "Sets to private"
```

```
> db.posts.find({username:"GoodGuyGreg"}).pretty()
{
        "_id" : ObjectId("61066e04d7dfed5b5c713e9f"),
        "username" : "GoodGuyGreg",
        "title" : "Passes out at Party",
        "body" : "Raises your credit score"
}
{
        "_id" : ObjectId("61066ea09dd09bc384f5166a"),
        "username" : "GoodGuyGreg",
        "title" : "Steals your identity",
        "body" : "Raises your credit score"
}
{
        "_id" : ObjectId("61066ec59dd09bc384f5166b"),
        "username" : "GoodGuyGreg",
        "title" : "Reports a bug in your code",
        "body" : "Sends you a pull request"
}
```

```
db.comments.find().pretty()
      "_id" : ObjectId("61066f8c9dd09bc384f5166f"),
      "username" : "GoodGuyGreg",
      "comment" : "Hope you got a good deal!",
      "post" : ObjectId("61066ed19dd09bc384f5166c")
      "_id" : ObjectId("6106705c9dd09bc384f51670"),
      "username" : "GoodGuyGreg",
      "comment" : "What's mine is yours!",
      "post" : ObjectId("61066edd9dd09bc384f5166d")
      " id" : ObjectId("6106708b9dd09bc384f51671"),
      "username" : "GoodGuyGreg",
      "comment" : "Don't violate the licensing agreement!",
      "post" : ObjectId("61066eea9dd09bc384f5166e")
      "_id" : ObjectId("610670bf9dd09bc384f51672"),
      "username" : "ScumbagSteve",
      "comment" : "It still isn't clean",
      "post" : ObjectId("61066e04d7dfed5b5c713e9f")
      " id" : ObjectId("610670ed9dd09bc384f51673"),
      "username" : "ScumbagSteve",
      "comment" : "Denied your PR cause I found a hack",
      "post" : ObjectId("61066ec59dd09bc384f5166b")
```

```
7.
```

```
> db.posts.find({title:"Reports a bug in your code"}).pretty()
{
        "_id" : ObjectId("61066ec59dd09bc384f5166b"),
        "username" : "GoodGuyGreg",
        "title" : "Reports a bug in your code",
        "body" : "Sends you a pull request"
}
>
```