

MongoDB Lab Assignments -Day 1

> show dbs

```
admin      0.000GB
config     0.000GB
local      0.000GB
mongo_practice 0.000GB
```

> use mongo_practice

switched to db mongo_practice

> show collections

movies

Query / Find Documents

1. > db.movies.find().pretty()

```
{
  "_id" : ObjectId("5ffe9bcbd1bd012aec56674f"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : "1999",
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("5ffe9d37d1bd012aec566750"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : "1994",
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("5ffe9ddcd1bd012aec566751"),
  "title" : "Inglorious Basterds",
```

```

    "writer" : "Quentin Tarantino",
    "year" : "2009",
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
}
{
    "_id" : ObjectId("5ffea05ed1bd012aec566752"),
    "title" : "The Hobbit : An Unexpected Journey",
    "writer" : "J.R.R. Tolkein",
    "year" : "2012",
    "franchise" : "The Hobbit"
}
{
    "_id" : ObjectId("5ffea1bdd1bd012aec566753"),
    "title" : "The Hobbit : The Desolation of Smaug",
    "writer" : "J.R.R.Tolkein",
    "year" : "2013",
    "franchise" : "The Hobbit"
}
{
    "_id" : ObjectId("5ffea2afd1bd012aec566754"),
    "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 arising darkness."
}
{
    "_id" : ObjectId("5ffea646d1bd012aec566755"),
    "title" : "Pee Wee Herman's Big Adventure"
}

```

```
{ "_id" : ObjectId("5ffea652d1bd012aec566756"), "title" : "Avatar" }
```

2. > db.movies.find({writer:"Quentin Tarantino"}).pretty()

```
{
  "_id" : ObjectId("5ffe9d37d1bd012aec566750"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : "1994",
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
```

```
{
  "_id" : ObjectId("5ffe9ddcd1bd012aec566751"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : "2009",
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
```

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

```
{
  "_id" : ObjectId("5ffe9bcbd1bd012aec56674f"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : "1999",
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
```

```
{
  "_id" : ObjectId("5ffe9ddcd1bd012aec566751"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : "2009",
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
```

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

```
{
  "_id" : ObjectId("5ffea05ed1bd012aec566752"),
  "title" : "The Hobbit : An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : "2012",
  "franchise" : "The Hobbit"
}
```

```
{
  "_id" : ObjectId("5ffea1bdd1bd012aec566753"),
  "title" : "The Hobbit : The Desolation of Smaug",
  "writer" : "J.R.R.Tolkein",
  "year" : "2013",
  "franchise" : "The Hobbit"
}
```

```
{
  "_id" : ObjectId("5ffea2afd1bd012aec566754"),
  "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 arising darkness."
```

```
}
```

5. > db.movies.find({\$and:[{year:{\$gte:"1990"}}, {year:{\$lt:"2000"}}]}).pretty()

```
{
  "_id" : ObjectId("5ffe9bcbd1bd012aec56674f"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : "1999",
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("5ffe9d37d1bd012aec566750"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : "1994",
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
```

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

```
{
  "_id" : ObjectId("5ffe9bcbd1bd012aec56674f"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : "1999",
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("5ffe9d37d1bd012aec566750"),
```

```

    "title" : "Pulp Fiction",
    "writer" : "Quentin Tarantino",
    "year" : "1994",
    "actors" : [
        "John Travolta",
        "Uma Thurman"
    ]
}
{
    "_id" : ObjectId("5ffea05ed1bd012aec566752"),
    "title" : "The Hobbit : An Unexpected Journey",
    "writer" : "J.R.R. Tolkein",
    "year" : "2012",
    "franchise" : "The Hobbit"
}
{
    "_id" : ObjectId("5ffea1bdd1bd012aec566753"),
    "title" : "The Hobbit : The Desolation of Smaug",
    "writer" : "J.R.R.Tolkein",
    "year" : "2013",
    "franchise" : "The Hobbit"
}
{
    "_id" : ObjectId("5ffea2afd1bd012aec566754"),
    "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 arising darkness."
}

```

Update Documents

```

1. > db.movies.updateOne(
{"title" : "The Hobbit : An Unexpected Journey"},

```

```
{$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."}}}
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
2. > db.movies.updateOne(
```

```
  {"title" : "The Hobbit : The Desolation of Smaug"},
```

```
  {$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."}}}
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
3. > db.movies.updateOne({title: "Pulp Fiction"},{$push:{actors:"Samuel L. Jackson"}})
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

Text Search

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

```
{  
  "createdCollectionAutomatically" : false,  
  "numIndexesBefore" : 1,  
  "numIndexesAfter" : 2,  
  "ok" : 1  
}
```

```
1. > db.movies.find({$text:{$search:"Bilbo"}}).pretty()
```

```
{  
  "_id" : ObjectId("5ffed6b7d4867fe9e81bb6ff"),  
  "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 a mysterious and magical ring."  
}
```

```
{  
  "_id" : ObjectId("5ffed745d4867fe9e81bb700"),  
  "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 arising darkness."
}
{
    "_id" : ObjectId("5ffed696d4867fe9e81bb6fe"),
    "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."
}

```

2. > db.movies.find({\$text:{\$search:"Gandalf"}}).pretty()

```

{
    "_id" : ObjectId("5ffed6b7d4867fe9e81bb6ff"),
    "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 a mysterious and
magical ring."
}

```

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

```

{
    "_id" : ObjectId("5ffed745d4867fe9e81bb700"),
    "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 arising darkness."
}
{
    "_id" : ObjectId("5ffed696d4867fe9e81bb6fe"),

```



```

"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."
}

```

4. > db.movies.find({\$text:{\$search:"dwarves hobbit"}}).pretty()

```

{
  "_id" : ObjectId("5ffed696d4867fe9e81bb6fe"),
  "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("5ffed6b7d4867fe9e81bb6ff"),
  "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 a mysterious and magical ring."
}

```

5. > db.movies.find({\$text:{\$search:"\"gold\" \"dragon\""}}).pretty()

```

{
  "_id" : ObjectId("5ffed696d4867fe9e81bb6fe"),
  "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."
}

```

```
}
```

Delete Documents

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

```
WriteResult({ "nRemoved" : 1 })
```

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

```
WriteResult({ "nRemoved" : 1 })
```

Relationship

Querying related collections

```
1. > db.users.find().pretty()
```

```
{
  "_id" : ObjectId("5ffee55ad4867fe9e81bb702"),
  "username" : "GoodGuyGreg",
  "first_name" : "GoodGuy",
  "last_name" : "Greg"
}
{
  "_id" : ObjectId("5ffee575d4867fe9e81bb703"),
  "username" : "ScumbagSteve",
  "full_name" : {
    "first" : "Scumbag",
    "last" : "Steve"
  }
}
}
```

```
2. > db.posts.find().pretty()
```

```
{
  "_id" : ObjectId("5ffee60bd4867fe9e81bb704"),
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",
  "body" : "Wakes up early and cleans house"
}
{
  "_id" : ObjectId("5ffee692d4867fe9e81bb705"),
```

```

    "username" : "GoodGuyGreg",
    "title" : "Steals your identity",
    "body" : "Raises your credit score"
  }
  {
    "_id" : ObjectId("5ffee6d8d4867fe9e81bb706"),
    "username" : "GoodGuyGreg",
    "title" : "Reports a bug in your code",
    "body" : "Sends you a Pull Request"
  }
  {
    "_id" : ObjectId("5ffee824d4867fe9e81bb707"),
    "username" : "ScumbagSteve",
    "title" : "Borrows something",
    "body" : "Sells it"
  }
  {
    "_id" : ObjectId("5ffee824d4867fe9e81bb708"),
    "username" : "ScumbagSteve",
    "title" : "Borrows everything",
    "body" : "The end"
  }
  {
    "_id" : ObjectId("5ffee824d4867fe9e81bb709"),
    "username" : "ScumbagSteve",
    "title" : "Forks your repo on github",
    "body" : "Sets to private"
  }
}

```

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

```

{
  "_id" : ObjectId("5ffee60bd4867fe9e81bb704"),
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",

```

```

    "body" : "Wakes up early and cleans house"
  }
  {
    "_id" : ObjectId("5ffee692d4867fe9e81bb705"),
    "username" : "GoodGuyGreg",
    "title" : "Steals your identity",
    "body" : "Raises your credit score"
  }
  {
    "_id" : ObjectId("5ffee6d8d4867fe9e81bb706"),
    "username" : "GoodGuyGreg",
    "title" : "Reports a bug in your code",
    "body" : "Sends you a Pull Request"
  }

```

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

```

{
  "_id" : ObjectId("5ffee824d4867fe9e81bb707"),
  "username" : "ScumbagSteve",
  "title" : "Borrows something",
  "body" : "Sells it"
}
{
  "_id" : ObjectId("5ffee824d4867fe9e81bb708"),
  "username" : "ScumbagSteve",
  "title" : "Borrows everything",
  "body" : "The end"
}
{
  "_id" : ObjectId("5ffee824d4867fe9e81bb709"),
  "username" : "ScumbagSteve",
  "title" : "Forks your repo on github",
  "body" : "Sets to private"
}

```

5. > db.comments.find().pretty()

```
{
  "_id" : ObjectId("5ffeebb0d4867fe9e81bb70a"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : [
    "5ffee824d4867fe9e81bb707"
  ]
}
{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70b"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours!",
  "post" : [
    "5ffee824d4867fe9e81bb708"
  ]
}
{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70c"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement!",
  "post" : [
    "5ffee824d4867fe9e81bb709"
  ]
}
{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70d"),
  "username" : "ScumbagSteve",
  "comment" : "It still isn't clean",
  "post" : [
    "5ffee60bd4867fe9e81bb704"
  ]
}
{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70e"),
```

```

    "username" : "ScumbagSteve",
    "comment" : "Denied your PR cause I found a hack",
    "post" : [
        "5ffee6d8d4867fe9e81bb706"
    ]
}

```

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

```

{
  "_id" : ObjectId("5ffeebb0d4867fe9e81bb70a"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : [
    "5ffee824d4867fe9e81bb707"
  ]
}

```

```

{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70b"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours!",
  "post" : [
    "5ffee824d4867fe9e81bb708"
  ]
}

```

```

{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70c"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement!",
  "post" : [
    "5ffee824d4867fe9e81bb709"
  ]
}

```

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

```

{
  "_id" : ObjectId("5ffeebf3d4867fe9e81bb70d"),

```

```

    "username" : "ScumbagSteve",
    "comment" : "It still isn't clean",
    "post" : [
        "5ffee60bd4867fe9e81bb704"
    ]
}
{
    "_id" : ObjectId("5ffeebf3d4867fe9e81bb70e"),
    "username" : "ScumbagSteve",
    "comment" : "Denied your PR cause I found a hack",
    "post" : [
        "5ffee6d8d4867fe9e81bb706"
    ]
}

```

8. > db.comments.find({"post":"5ffee6d8d4867fe9e81bb706"}).pretty()

```

{
    "_id" : ObjectId("5ffeebf3d4867fe9e81bb70e"),
    "username" : "ScumbagSteve",
    "comment" : "Denied your PR cause I found a hack",
    "post" : [
        "5ffee6d8d4867fe9e81bb706"
    ]
}

```