

MONGODB- ASSIGNMENT 1:

Query/ Find Documents:

1.

```
> db.movies.find().pretty()
{
  "_id" : ObjectId("6107059cd62494f023c6f85c"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85d"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thuman"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85e"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
}
```

```

{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of 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 rising darkness"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f862"),
  "title" : "Pee Wee Herman's Big Adventure"
}
{ "_id" : ObjectId("6107082cd62494f023c6f863"), "title" : "Avatar" }
>

```

2.

```

> db.movies.find({writer:"Quentin Tarantino"}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85d"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thuman"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85e"),
  "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("6107059cd62494f023c6f85c"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85e"),
  "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("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of 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 rising darkness"
}
```

5.

```
> db.movies.find({year:{$gt:1990,$lt:2000}}).pretty()
{
  "_id" : ObjectId("6107059cd62494f023c6f85c"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85d"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thuman"
  ]
}
```

6.

```
> db.movies.find({$or: [{year:{$lt:2000}}, {year:{$gt:2010}} ]}).pretty()
{
  "_id" : ObjectId("6107059cd62494f023c6f85c"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuko",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85d"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thuman"
  ]
}
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of 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
    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 rising dark
ness"
}
>
```

Update Documents:

1.

```
> db.movies.update({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"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.movies.find(title:"The Hobbit: An Unexpected Journey").pretty()
uncaught exception: SyntaxError: missing ) after argument list :
@(shell):1:20
> db.movies.find({title:"The Hobbit: An Unexpected Journey"}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "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.update({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."}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.movies.find({title:"The Hobbit: The Desolation of Smaug"}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f860"),
  "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.update( {title:"Pulp Fiction"}, {$push:{actors:"Samuel L. Jackson"}} )
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.movies.find({title:"Pulp Fiction"}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85d"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman",
    "Samuel L. Jackson"
  ]
}
```

Text Search:

1.

```
> db.movies.find({synopsis:/Bilbo/}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkien",
  "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("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkien",
  "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("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of Five Armies",
  "writer" : "J.R.R. Tolkien",
  "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 rising darkness"
}
```

2.

```
> db.movies.find({synopsis:/Gandalf/}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkien",
  "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({$and:[{synopsis:/Bilbo/},{synopsis:{not:/Gandalf/}}]}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkien",
  "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("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of Five Armies",
  "writer" : "J.R.R. Tolkien",
  "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 rising darkness"
}
>
```

4.

```
> db.movies.find({$or:[{synopsis:/dwarves/},{synopsis:/hobbit/}]}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkien",
  "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("6107082cd62494f023c6f860"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkien",
  "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("6107082cd62494f023c6f861"),
  "title" : "The Hobbit: The Battle of Five Armies",
  "writer" : "J.R.R. Tolkien",
  "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 rising darkness"
}
```

5.

```
> db.movies.find({$and:[{synopsis:/gold/},{synopsis:/dragon/}]}).pretty()
{
  "_id" : ObjectId("6107082cd62494f023c6f85f"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkien",
  "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:

1.

```
> db.movies.remove({title:"Pee Wee Herman's Big Adventure"})
WriteResult({ "nRemoved" : 1 })
```

2.

```
> db.movies.remove({title:"Avatar"})
WriteResult({ "nRemoved" : 1 })
>
```

Relationships:

1.

```
> db.users.insertMany([{username:"GoodGuyGreg",first_name:"Good Guy",last_name
... : "Greg"}
... ,{username:"ScumbagSteve",full_name:{first_name:"Scumbag",last_name:"Steve"}}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("61078ef5e3e012de139585b1"),
    ObjectId("61078ef5e3e012de139585b2")
  ]
}
```


2.

```
> db.posts.insertMany([
... {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"}
... ])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("610790fde3e012de139585b3"),
    ObjectId("610790fde3e012de139585b4"),
    ObjectId("610790fde3e012de139585b5"),
    ObjectId("610790fde3e012de139585b6"),
    ObjectId("610790fde3e012de139585b7"),
    ObjectId("610790fde3e012de139585b8")
  ]
}
```

3.

```
> db.comments.insert(
... {username:"GoodGuyGreg",
... comment:"Hope you got a good deal!",
... post:ObjectId("610790fde3e012de139585b6")},
... )
WriteResult({ "nInserted" : 1 })
```

```

> db.comments.insertMany([
... {username:"GoodGuyGreg",
... comment:"What's mine is yours",
...
... post:ObjectId("610790fde3e012de139585b7")},
... {username:"GoodGuyGreg",
... comment:"Don't violate the licensing agreement",
... post:ObjectId("610790fde3e012de139585b8")},
... {username:"ScumbagSteve",
... comment:"It still isn't clean",
... post: ObjectId("610790fde3e012de139585b3")},
... {username:"ScumbagSteve",
... comment:"Denied your PR cause I found a hack",
... post:ObjectId("610790fde3e012de139585b5")}
... ])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("6107b627d6f7ffd3e8a1aee2"),
    ObjectId("6107b627d6f7ffd3e8a1aee3"),
    ObjectId("6107b627d6f7ffd3e8a1aee4"),
    ObjectId("6107b627d6f7ffd3e8a1aee5")
  ]
}

```

Querying Related collections:

1.

```

> db.users.find().pretty()
{
  "_id" : ObjectId("61078ef5e3e012de139585b1"),
  "username" : "GoodGuyGreg",
  "first_name" : "Good Guy",
  "last_name" : "Greg"
}
{
  "_id" : ObjectId("61078ef5e3e012de139585b2"),
  "username" : "ScumbagSteve",
  "full_name" : {
    "first_name" : "Scumbag",
    "last_name" : "Steve"
  }
}

```

2.

```
> db.posts.find().pretty()
{
  "_id" : ObjectId("610790fde3e012de139585b3"),
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",
  "body" : "Wakes up early and cleans house"
}
{
  "_id" : ObjectId("610790fde3e012de139585b4"),
  "username" : "GoodGuyGreg",
  "title" : "Steals your identity",
  "body" : "Raises your credit score"
}
{
  "_id" : ObjectId("610790fde3e012de139585b5"),
  "username" : "GoodGuyGreg",
  "title" : "Reports a bug in your code",
  "body" : "Sends you a Pull Request"
}
{
  "_id" : ObjectId("610790fde3e012de139585b6"),
  "username" : "ScumbagSteve",
  "title" : "Borrows something",
  "body" : "Sells it"
}
{
  "_id" : ObjectId("610790fde3e012de139585b7"),
  "username" : "ScumbagSteve",
  "title" : "Borrows everything",
  "body" : "The end"
}
{
  "_id" : ObjectId("610790fde3e012de139585b8"),
  "username" : "ScumbagSteve",
  "title" : "Forks your Repo on github",
  "body" : "Sets to private"
}
```

3.

```
> db.posts.find({username:"GoodGuyGreg"}).pretty()
{
  "_id" : ObjectId("610790fde3e012de139585b3"),
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",
  "body" : "Wakes up early and cleans house"
}
{
  "_id" : ObjectId("610790fde3e012de139585b4"),
  "username" : "GoodGuyGreg",
  "title" : "Steals your identity",
  "body" : "Raises your credit score"
}
3 {
  "_id" : ObjectId("610790fde3e012de139585b5"),
  "username" : "GoodGuyGreg",
  "title" : "Reports a bug in your code",
  "body" : "Sends you a Pull Request"
}
```

4.

```
> db.posts.find({username:"ScumbagSteve"}).pretty()
{
  "_id" : ObjectId("610790fde3e012de139585b6"),
  "username" : "ScumbagSteve",
  "title" : "Borrows something",
  "body" : "Sells it"
}
{
  "_id" : ObjectId("610790fde3e012de139585b7"),
  "username" : "ScumbagSteve",
  "title" : "Borrows everything",
  "body" : "The end"
}
{
  "_id" : ObjectId("610790fde3e012de139585b8"),
  "username" : "ScumbagSteve",
  "title" : "Forks your Repo on github",
  "body" : "Sets to private"
}
```

5.

```
> db.comments.find().pretty()
{
  "_id" : ObjectId("61079378e3e012de139585ba"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : ObjectId("610790fde3e012de139585b6")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee2"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours",
  "post" : ObjectId("610790fde3e012de139585b7")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee3"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement",
  "post" : ObjectId("610790fde3e012de139585b8")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee4"),
  "username" : "ScumbagSteve",
  "comment" : "It still isn't clean",
  "post" : ObjectId("610790fde3e012de139585b3")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee5"),
  "username" : "ScumbagSteve",
  "comment" : "Denied your PR cause I found a hack",
  "post" : ObjectId("610790fde3e012de139585b5")
}
```

6.

```
> db.comments.find({username:"GoodGuyGreg"}).pretty()
{
  "_id" : ObjectId("61079378e3e012de139585ba"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : ObjectId("610790fde3e012de139585b6")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee2"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours",
  "post" : ObjectId("610790fde3e012de139585b7")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee3"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement",
  "post" : ObjectId("610790fde3e012de139585b8")
}
```

7.

```
> db.comments.find({username:"ScumbagSteve"}).pretty()
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee4"),
  "username" : "ScumbagSteve",
  "comment" : "It still isn't clean",
  "post" : ObjectId("610790fde3e012de139585b3")
}
{
  "_id" : ObjectId("6107b627d6f7ffd3e8a1aee5"),
  "username" : "ScumbagSteve",
  "comment" : "Denied your PR cause I found a hack",
  "post" : ObjectId("610790fde3e012de139585b5")
}
```

8.

```
db.comments.find({post:ObjectId("6106cffe034cb5c97f435a0")}).pretty();ObjectId("6106cffe034cb5c97f435a0")}).pretty();
{
  "_id" : ObjectId("6106d824879a6071ebec0f6d"),
  "username" : "ScumbagSteve",
  "comment" : "Denied your PR cause I found a hack",
  "post" : ObjectId("6106cffe034cb5c97f435a0")
}
MongoDB Enterprise atlas-14bpr7-shard-0:PRIMARY> 
```