

# Mongodb Assignment 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.

```
Atlas atlas-2w6f2t-shard-0 [primary] test> use mongo_practice
```

```
switched to db mongo_practice
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.createCollection('movies');
{ ok: 1 }
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({title:"Fight Club",
writer:"Chuck Palahniuko", year:"1999", actors:["Brad Pitt", "Edward Norton"]})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or
bulkWrite.
```

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("62033c4a6f4489cae2c8559f") }
}
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({title:"Fight Club",
writer:"Chuck Palahniuko", year:"1999", actors:["Brad Pitt, Edward Norton"]}
... )
```

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("62033d206f4489cae2c855a0") }
}
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({ title: "Pulp Fiction",
writer: "Quentin Tarantino", year: "1994", actors: "[John Travolta, Uma Thurman]" })
```

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("62033daa6f4489cae2c855a1") }
}
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({ title: "Inglorious
Basterds", writer: "Quentin Tarantino", year: "2009", actors: "[Brad Pitt, Diane Kruger, Eli
Roth]" })
```

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("62033e6c6f4489cae2c855a2") }
}
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({ title: "The Hobbit:
An Unexpected Journey", writer: "J.R.R Tolkein", year: "2012", franchise:"The Hobbit"})
```

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("62033f686f4489cae2c855a3") }
}
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({ title: "The Hobbit:
The Desolation of Smaug", writer: "J.R.R Tolkein", year: "2013", franchise:"The Hobbit"})
```

```
{
  acknowledged: true,
```

```

insertedIds: { '0': ObjectId("62033fb66f4489cae2c855a4") }
}
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({ 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."})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("620340a56f4489cae2c855a6") }
}
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({title:"Pee Wee
Herman's Big Adventure"})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("6203413f6f4489cae2c855a7") }
}
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.insert({title:"Avatar"})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("620341506f4489cae2c855a8") }
}

```

### Query / Find Documents

```

Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.find()
[
  {
    _id: ObjectId("62033d206f4489cae2c855a0"),
    title: 'Fight Club',
    writer: 'Chuck Palahniuko',
    year: '1999',
    actors: '[Brad Pitt, Edward Norton]'
  },
  {
    _id: ObjectId("62033daa6f4489cae2c855a1"),
    title: 'Pulp Fiction',
    writer: 'Quentin Tarantino',
    year: '1994',
    actors: '[John Travolta, Uma Thurman]'
  },
  {
    _id: ObjectId("62033e6c6f4489cae2c855a2"),
    title: 'Inglorious Basterds',
    writer: 'Quentin Tarantino',
    year: '2009',
    actors: '[Brad Pitt, Diane Kruger, Eli Roth]'
  },
  {
    _id: ObjectId("62033f686f4489cae2c855a3"),
    title: 'The Hobbit: An Unexpected Journey',
    writer: 'J.R.R Tolkein',

```

```

year: '2012',
franchise: 'The Hobbit'
},
{
  _id: ObjectId("62033fb66f4489cae2c855a4"),
  title: 'The Hobbit: The Desolation of Smaug',
  writer: 'J.R.R Tolkein',
  year: '2013',
  franchise: 'The Hobbit'
},
{
  _id: ObjectId("620340a56f4489cae2c855a6"),
  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.'
},
{
  _id: ObjectId("6203413f6f4489cae2c855a7"),
  title: "Pee Wee Herman's Big Adventure"
},
{ _id: ObjectId("620341506f4489cae2c855a8"), title: 'Avatar' }
]
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.find({writer:"Quentin
Tarantino"})
[
  {
    _id: ObjectId("62033daa6f4489cae2c855a1"),
    title: 'Pulp Fiction',
    writer: 'Quentin Tarantino',
    year: '1994',
    actors: '[John Travolta, Uma Thurman]'
  },
  {
    _id: ObjectId("62033e6c6f4489cae2c855a2"),
    title: 'Inglorious Basterds',
    writer: 'Quentin Tarantino',
    year: '2009',
    actors: '[Brad Pitt, Diane Kruger, Eli Roth]'
  }
]
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.find({franchise:"The
Hobbit"})
[
  {
    _id: ObjectId("62033f686f4489cae2c855a3"),
    title: 'The Hobbit: An Unexpected Journey',
    writer: 'J.R.R Tolkein',
    year: '2012',

```

```

franchise: 'The Hobbit'
},
{
  _id: ObjectId("62033fb66f4489cae2c855a4"),
  title: 'The Hobbit: The Desolation of Smaug',
  writer: 'J.R.R Tolkein',
  year: '2013',
  franchise: 'The Hobbit'
},
{
  _id: ObjectId("620340a56f4489cae2c855a6"),
  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.'
}
]
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.find({year: {$gt:"1990",
$lt:"2000"}})
[
{
  _id: ObjectId("62033d206f4489cae2c855a0"),
  title: 'Fight Club',
  writer: 'Chuck Palahniuko',
  year: '1999',
  actors: '[Brad Pitt, Edward Norton]'
},
{
  _id: ObjectId("62033daa6f4489cae2c855a1"),
  title: 'Pulp Fiction',
  writer: 'Quentin Tarantino',
  year: '1994',
  actors: '[John Travolta, Uma Thurman]'
}
]
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.find({$or:[{year:
{$gt:"2010"}}, {year: {$lt:"2000"}}]})
[
{
  _id: ObjectId("62033d206f4489cae2c855a0"),
  title: 'Fight Club',
  writer: 'Chuck Palahniuko',
  year: '1999',
  actors: '[Brad Pitt, Edward Norton]'
},
{
  _id: ObjectId("62033daa6f4489cae2c855a1"),
  title: 'Pulp Fiction',
  writer: 'Quentin Tarantino',

```

```

year: '1994',
actors: '[John Travolta, Uma Thurman]'
},
{
  _id: ObjectId("62033f686f4489cae2c855a3"),
  title: 'The Hobbit: An Unexpected Journey',
  writer: 'J.R.R Tolkein',
  year: '2012',
  franchise: 'The Hobbit'
},
{
  _id: ObjectId("62033fb66f4489cae2c855a4"),
  title: 'The Hobbit: The Desolation of Smaug',
  writer: 'J.R.R Tolkein',
  year: '2013',
  franchise: 'The Hobbit'
},
{
  _id: ObjectId("620340a56f4489cae2c855a6"),
  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.'
}
]

```

## Update Documents

Atlas atlas-2w6f2t-shard-0 [primary] mongo\_practice> db.movies.update({\_id: ObjectId("62033f686f4489cae2c855a3")}, {\$set:{synopsis:"A reluctant Hobbit, Biblo Baggins, sets out to the Lonely Mountains with a spirited group of dwarves to reclaim their mountain home - and the gold with it - from the dragon Smaug."}})

DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.

```

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}

```

Atlas atlas-2w6f2t-shard-0 [primary] mongo\_practice> db.movies.update({\_id: ObjectId("62033fb66f4489cae2c855a4")}, {\$set:{synopsis:"The dwarves, along with Biblo Baggins, and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Biblo Baggins is in possession of a mysterious and magical ring."}})

```

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,

```

```
modifiedCount: 1,  
upsertedCount: 0  
}
```

### Text Search

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice>  
db.movies.find({synopsis:{$regex:"Biblo"}})
```

```
[  
{  
  _id: ObjectId("62033f686f4489cae2c855a3"),  
  title: 'The Hobbit: An Unexpected Journey',  
  writer: 'J.R.R Tolkein',  
  year: '2012',  
  franchise: 'The Hobbit',  
  synopsis: 'A reluctant Hobbit, Biblo Baggins, sets out to the Lonely Mountains with a  
spirited group of dwarves to reclaim their mountain home - and the gold with it - from the  
dragon Smaug.'  
},  
{  
  _id: ObjectId("62033fb66f4489cae2c855a4"),  
  title: 'The Hobbit: The Desolation of Smaug',  
  writer: 'J.R.R Tolkein',  
  year: '2013',  
  franchise: 'The Hobbit',  
  synopsis: 'The dwarves, along with Biblo Baggins, and Gandalf the Grey, continue their  
quest to reclaim Erebor, their homeland, from Smaug. Biblo Baggins is in possession of a  
mysterious and magical ring.'  
}  
]
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice>  
db.movies.find({synopsis:{$regex:"Gandalf"}})
```

```
[  
{  
  _id: ObjectId("62033fb66f4489cae2c855a4"),  
  title: 'The Hobbit: The Desolation of Smaug',  
  writer: 'J.R.R Tolkein',  
  year: '2013',  
  franchise: 'The Hobbit',  
  synopsis: 'The dwarves, along with Biblo Baggins, and Gandalf the Grey, continue their  
quest to reclaim Erebor, their homeland, from Smaug. Biblo Baggins is in possession of a  
mysterious and magical ring.'  
}  
]
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice>
```

```
db.movies.find({$and:[{synopsis:{$regex:"Biblo"}},{synopsis:{$not:/Gandalf/}}]})
```

```
[  
{  
  _id: ObjectId("62033f686f4489cae2c855a3"),  
  title: 'The Hobbit: An Unexpected Journey',  
  writer: 'J.R.R Tolkein',
```

```
year: '2012',
franchise: 'The Hobbit',
synopsis: 'A reluctant Hobbit, Biblo Baggins, sets out to the Lonely Mountains with a
spirited group of dwarves to reclaim their mountain home - and the gold with it - from the
dragon Smaug.'
```

```
}
```

```
]
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice>
```

```
db.movies.find({$or:[{synopsis:{$regex:"dwarves"}}, {synopsis:{$regex:"hobbit"}}})
```

```
[
```

```
{
```

```
  _id: ObjectId("62033f686f4489cae2c855a3"),
```

```
  title: 'The Hobbit: An Unexpected Journey',
```

```
  writer: 'J.R.R Tolkein',
```

```
  year: '2012',
```

```
  franchise: 'The Hobbit',
```

```
  synopsis: 'A reluctant Hobbit, Biblo Baggins, sets out to the Lonely Mountains with a
spirited group of dwarves to reclaim their mountain home - and the gold with it - from the
dragon Smaug.'
```

```
},
```

```
{
```

```
  _id: ObjectId("62033fb66f4489cae2c855a4"),
```

```
  title: 'The Hobbit: The Desolation of Smaug',
```

```
  writer: 'J.R.R Tolkein',
```

```
  year: '2013',
```

```
  franchise: 'The Hobbit',
```

```
  synopsis: 'The dwarves, along with Biblo Baggins, and Gandalf the Grey, continue their
quest to reclaim Erebor, their homeland, from Smaug. Biblo Baggins is in possession of a
mysterious and magical ring.'
```

```
}
```

```
]
```

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice>
```

```
db.movies.find({$and:[{synopsis:{$regex:"gold"}},{synopsis:{$regex:"dragon"}}})
```

```
[
```

```
{
```

```
  _id: ObjectId("62033f686f4489cae2c855a3"),
```

```
  title: 'The Hobbit: An Unexpected Journey',
```

```
  writer: 'J.R.R Tolkein',
```

```
  year: '2012',
```

```
  franchise: 'The Hobbit',
```

```
  synopsis: 'A reluctant Hobbit, Biblo Baggins, sets out to the Lonely Mountains with a
spirited group of dwarves to reclaim their mountain home - and the gold with it - from the
dragon Smaug.'
```

```
}
```

```
]
```

## Delete Documents

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.remove({_id:
ObjectId("6203413f6f4489cae2c855a7"))}
DeprecationWarning: Collection.remove() is deprecated. Use deleteOne, deleteMany,
findOneAndDelete, or bulkWrite.
{ acknowledged: true, deletedCount: 1 }
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.movies.remove({_id:
ObjectId("620341506f4489cae2c855a8"))}
{ acknowledged: true, deletedCount: 1 }
```

## Relationships

1. Insert the following documents into a **users** collection

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.users.insertMany([
... username:"GoodGuyGreg",
... first_name:"Good Guy",
... last_name:"Greg"
... }
... ,{
..... username:"ScumbagSteve",
..... first_name:"Scumbag",
..... last_name:"Steve",
..... }
... ]
... )
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("620392042a7bcebdfcf30cd5"),
    '1': ObjectId("620392042a7bcebdfcf30cd6")
  }
}
```

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

```
Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> 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: {
'0': ObjectId("6203950a2a7bcebdfcf30cd8"),
'1': ObjectId("6203950a2a7bcebdfcf30cd9"),
'2': ObjectId("6203950a2a7bcebdfcf30cda"),
'3': ObjectId("6203950a2a7bcebdfcf30cdb"),
'4': ObjectId("6203950a2a7bcebdfcf30cdc"),
'5': ObjectId("6203950a2a7bcebdfcf30cdd")
}
}

```

### 3. Insert the following documents into a **comments** collection

```

Atlas atlas-2w6f2t-shard-0 [primary] mongo_practice> db.comments.insertMany([
... username : "GoodGuyGreg",
... Comment : "Hope you got a good deal!",
... post : ObjectId("6202ae744056de6680dc9427")
... },
... {
..... username : "GoodGuyGreg",
..... Comment : "What's mine is yours !",
..... post : ObjectId("6202ae744056de6680dc9428")
..... },
... {
..... username : "GoodGuyGreg",
..... Comment : "Don't vioalte the licesing agreement!",
..... post : ObjectId("6202ae744056de6680dc942a")
..... },
... {
..... username : "ScumbagSteve",
..... comment : "It still isn't clean",
..... post : ObjectId("6202ae744056de6680dc9425")
..... }

```

```
... ])  
{  
  acknowledged: true,  
  insertedIds: {  
    '0': ObjectId("620395d12a7bcebdfcf30cde"),  
    '1': ObjectId("620395d12a7bcebdfcf30cdf"),  
    '2': ObjectId("620395d12a7bcebdfcf30ce0"),  
    '3': ObjectId("620395d12a7bcebdfcf30ce1")  
  }  
}
```

### **Querying related collections**

```
db.users.find()  
db.posts.find()  
db.posts.find({username:"GoodGuyGreg"})  
db.posts.find({username:"ScumbagSteve"})  
db.comments.find()  
db.comments.find({username:"GoodGuyGreg"})  
db.comments.find({username:"ScumbagSteve"})  
db.comments.find({post:ObjectId("62039aa72a7bcebdfcf30ce6")})
```