1. INSERT

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.insertOne({title: 'Fight Club', writer: 'Chuck Palahnuiko' , year: 1999 , actors: {name: ['Brad Pitt' , 'Edward Norton' ]}})

{

"acknowledged" : true,

"insertedId" : ObjectId("60ddbef99ada74792a7b9bcd")

}

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY>

db.movies.insertMany([{title: 'Pulp Fiction', writer: 'Quentin Tarantino' , year: 1994 , actors: {name:[ 'John Travolta' ,'Uma Thurman'] }},{title: 'Inglorious Bastards', writer: 'Quentin Tarantino' , year: 2009, actors: {name: ['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.'}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("60ddc0cc9ada74792a7b9bce"),

ObjectId("60ddc0cc9ada74792a7b9bcf"),

ObjectId("60ddc0cc9ada74792a7b9bd0"),

ObjectId("60ddc0cc9ada74792a7b9bd1"),

ObjectId("60ddc0cc9ada74792a7b9bd2")

]

}

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.insertMany([{title:'Pee Wee Herman`s Big Adventure'},{title:'Avatar'}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("60ddc1829ada74792a7b9bd3"),

ObjectId("60ddc1829ada74792a7b9bd4")

]

}

2. QUERIES

1. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find()

{ "\_id" : ObjectId("60ddbef99ada74792a7b9bcd"), "title" : "Fight Club", "writer" : "Chuck Palahnuiko", "year" : 1999, "actors" : { "name" : [ "Brad Pitt", "Edward Norton" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bce"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : { "name" : [ "John Travolta", "Uma Thurman" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bcf"), "title" : "Inglorious Bastards", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : { "name" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd2"), "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("60ddc1829ada74792a7b9bd3"), "title" : "Pee Wee Herman`s Big Adventure" }

{ "\_id" : ObjectId("60ddc1829ada74792a7b9bd4"), "title" : "Avatar" }

2. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({writer:'Quentin Tarantino'})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bce"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : { "name" : [ "John Travolta", "Uma Thurman" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bcf"), "title" : "Inglorious Bastards", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : { "name" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] } }

3.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({"actors.name":'Brad Pitt'})

{ "\_id" : ObjectId("60ddbef99ada74792a7b9bcd"), "title" : "Fight Club", "writer" : "Chuck Palahnuiko", "year" : 1999, "actors" : { "name" : [ "Brad Pitt", "Edward Norton" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bcf"), "title" : "Inglorious Bastards", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : { "name" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] } }

4.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({franchise:'The Hobbit'})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd2"), "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." }

5. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({year:{$gte:1990,$lte:2000}})

{ "\_id" : ObjectId("60ddbef99ada74792a7b9bcd"), "title" : "Fight Club", "writer" : "Chuck Palahnuiko", "year" : 1999, "actors" : { "name" : [ "Brad Pitt", "Edward Norton" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bce"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : { "name" : [ "John Travolta", "Uma Thurman" ] } }

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY>

6. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$or:[{year:{$lt:2000,$gt:2010}}]})

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$or:[{year:{$lt:2000}},{year:{$gt:2010}}]})

{ "\_id" : ObjectId("60ddbef99ada74792a7b9bcd"), "title" : "Fight Club", "writer" : "Chuck Palahnuiko", "year" : 1999, "actors" : { "name" : [ "Brad Pitt", "Edward Norton" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bce"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : { "name" : [ "John Travolta", "Uma Thurman" ] } }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd2"), "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." }

3.Update

1. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> 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 })

2. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> 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 })

3.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.update({title:'Pulp Fiction'},{$addToSet:{"actors.name":["'Samuel L. Jackson']}})

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

4. Text Search

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.createIndex({synopsis:"text"})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"commitQuorum" : "votingMembers",

"ok" : 1,

"$clusterTime" : {

"clusterTime" : Timestamp(1625210140, 7),

"signature" : {

"hash" : BinData(0,"r/+0PBE4WXEWDKZYLtr7nBAech8="),

"keyId" : NumberLong("6927408083782074369")

}

},

"operationTime" : Timestamp(1625210140, 7)

}

1. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$text:{$search:"Bilbo"}})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "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("60ddc0cc9ada74792a7b9bd2"), "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("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit", "synopsis" : "A reluctant hobbit, Bilbo Bagginssets 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.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$text:{$search:"Gandalf"}})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "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.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$text:{$search:"Bilbo -Gandalf"}})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd2"), "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("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit", "synopsis" : "A reluctant hobbit, Bilbo Bagginssets 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.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$text:{$search:"Bilbo hobbit"}})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd1"), "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("60ddc0cc9ada74792a7b9bd2"), "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("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit", "synopsis" : "A reluctant hobbit, Bilbo Bagginssets 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." }

5.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.find({$text:{$search:"gold dragon"}})

{ "\_id" : ObjectId("60ddc0cc9ada74792a7b9bd0"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit", "synopsis" : "A reluctant hobbit, Bilbo Bagginssets 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

1. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.deleteOne({title:'Pee Wee Herman`s Big Adventure'})

{ "acknowledged" : true, "deletedCount" : 1 }

2.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.movies.deleteOne({title:'Avatar'})

{ "acknowledged" : true, "deletedCount" : 1 }

RELATIONS

1.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.users.find()

{ "\_id" : ObjectId("60dec7fbb3a164ad618cf8aa"), "username" : "GoodGuyGreg", "first\_name" : "Good Guy", "last\_name" : "Greg" }

{ "\_id" : ObjectId("60dec7fbb3a164ad618cf8ab"), "username" : "ScumbagSteve", "fullname" : { "first" : "Scumbag", "last" : "Steve" } }

2.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.posts.find()

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ac"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ad"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ae"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a pull request" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8af"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8b0"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8b1"), "username" : "ScumbagSteve", "title" : "Fork your repo on github", "body" : "Sets to private" }

3. MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.posts.find({username:"GoodGuyGreg"})

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ac"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ad"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8ae"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a pull request" }

4.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.posts.find({username:"ScumbagSteve"})

{ "\_id" : ObjectId("60deca78b3a164ad618cf8af"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8b0"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end" }

{ "\_id" : ObjectId("60deca78b3a164ad618cf8b1"), "username" : "ScumbagSteve", "title" : "Fork your repo on github", "body" : "Sets to private" }

5.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.comments.find()

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b2"), "username" : "GoodGuyGreg", "comment" : "Hope you get a good deal!", "post" : ObjectId("60deca78b3a164ad618cf8af") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b3"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours", "post" : ObjectId("60deca78b3a164ad618cf8b0") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b4"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement", "post" : ObjectId("60deca78b3a164ad618cf8b1") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b5"), "username" : "ScumbagSteve", "comment" : "It still isn't Clean", "post" : ObjectId("60deca78b3a164ad618cf8ac") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b6"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("60deca78b3a164ad618cf8ae") }

6.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.comments.find({username:"GoodGuyGreg"})

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b2"), "username" : "GoodGuyGreg", "comment" : "Hope you get a good deal!", "post" : ObjectId("60deca78b3a164ad618cf8af") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b3"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours", "post" : ObjectId("60deca78b3a164ad618cf8b0") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b4"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement", "post" : ObjectId("60deca78b3a164ad618cf8b1") }

7.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.comments.find({username:"GoodGuyGreg"})

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b2"), "username" : "GoodGuyGreg", "comment" : "Hope you get a good deal!", "post" : ObjectId("60deca78b3a164ad618cf8af") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b3"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours", "post" : ObjectId("60deca78b3a164ad618cf8b0") }

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b4"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement", "post" : ObjectId("60deca78b3a164ad618cf8b1") }

8.

MongoDB Enterprise atlas-d9658j-shard-0:PRIMARY> db.comments.find({post:ObjectId("60deca78b3a164ad618cf8ae")})

{ "\_id" : ObjectId("60decf24b3a164ad618cf8b6"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("60deca78b3a164ad618cf8ae") }