**Query/Find Documents**

Q1

> db.movies.find()

{ "\_id" : ObjectId("60dedb5dff08be8427a1a868"), "title" : "Fight Club", "writer" : "Chuck Palahniuk", "year" : 1999, "actors" : [ "Brad Pitt", "Edward Norton" ] }

{ "\_id" : ObjectId("60dedbccff08be8427a1a869"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John Travolta", "Uma Thurman" ] }

{ "\_id" : ObjectId("60dede43ff08be8427a1a86a"), "title" : "Inglorious Basterds", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dede85ff08be8427a1a86c"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dedee2ff08be8427a1a86d"), "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("60dedf25ff08be8427a1a86e"), "title" : "Pee Wee Herman's Big Adventure" }

{ "\_id" : ObjectId("60dedf6fff08be8427a1a86f"), "title" : "Avatar" }

Q2

> db.movies.find({writer:'Quentin Tarantino'})

{ "\_id" : ObjectId("60dedbccff08be8427a1a869"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John Travolta", "Uma Thurman" ] }

{ "\_id" : ObjectId("60dede43ff08be8427a1a86a"), "title" : "Inglorious Basterds", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }

Q3

> db.movies.find({actors:'Brad Pitt'})

{ "\_id" : ObjectId("60dedb5dff08be8427a1a868"), "title" : "Fight Club", "writer" : "Chuck Palahniuk", "year" : 1999, "actors" : [ "Brad Pitt", "Edward Norton" ] }

{ "\_id" : ObjectId("60dede43ff08be8427a1a86a"), "title" : "Inglorious Basterds", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }

Q4

> db.movies.find({franchise:'The Hobbit'})

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dede85ff08be8427a1a86c"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dedee2ff08be8427a1a86d"), "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." }

Q5

> db.movies.find({"year":{$gte:1990,$lte:1999}})

{ "\_id" : ObjectId("60dedb5dff08be8427a1a868"), "title" : "Fight Club", "writer" : "Chuck Palahniuk", "year" : 1999, "actors" : [ "Brad Pitt", "Edward Norton" ] }

{ "\_id" : ObjectId("60dedbccff08be8427a1a869"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John Travolta", "Uma Thurman" ] }

Q6

db.movies.find({$or: [{year: {$lt:2000}}, {year:{$gt:2010}}]})

{ "\_id" : ObjectId("60dedb5dff08be8427a1a868"), "title" : "Fight Club", "writer" : "Chuck Palahniuk", "year" : 1999, "actors" : [ "Brad Pitt", "Edward Norton" ] }

{ "\_id" : ObjectId("60dedbccff08be8427a1a869"), "title" : "Pulp Fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John Travolta", "Uma Thurman" ] }

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "title" : "The Hobbit: An Unexpected Journey", "writer" : "J.R.R. Tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dede85ff08be8427a1a86c"), "title" : "The Hobbit: The Desolation of Smaug", "writer" : "J.R.R. Tolkein", "year" : 2013, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("60dedee2ff08be8427a1a86d"), "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." }

**Text Search**

Q1

> db.movies.find({synopsis:{$regex:"Bilbo"}})

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "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("60dede85ff08be8427a1a86c"), "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("60dedee2ff08be8427a1a86d"), "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." }

Q2

> db.movies.find({synopsis:{$regex:"Gandalf"}})

{ "\_id" : ObjectId("60dede85ff08be8427a1a86c"), "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." }

Q3

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

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "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("60dedee2ff08be8427a1a86d"), "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." }

Q4

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

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "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("60dede85ff08be8427a1a86c"), "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." }

Q5

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

{ "\_id" : ObjectId("60dede66ff08be8427a1a86b"), "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**

Q1

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

WriteResult({ "nRemoved" : 1 })

Q2

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

WriteResult({ "nRemoved" : 1 })

**Relationship**

**Querying related collections**

Q1

> db.users.find()

{ "\_id" : 1, "username" : "GoodGuyGreg", "first\_name" : "Good Guy", "last\_name" : "Greg" }

{ "\_id" : 2, "username" : "ScumbagSteve", "fullname" : { "first" : "Scumbag", "last" : "Steve" } }

Q2

db.posts.find()

{ "\_id" : ObjectId("60e00339ff08be8427a1a873"), "username" : "GoodGuyGreg", "title" : "Passes out at Party", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60e00346ff08be8427a1a874"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60e0035bff08be8427a1a875"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a pull request" }

{ "\_id" : ObjectId("60e0036cff08be8427a1a876"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("60e00379ff08be8427a1a877"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end" }

{ "\_id" : ObjectId("60e00383ff08be8427a1a878"), "username" : "ScumbagSteve", "title" : "Forks your repo on github", "body" : "Sets to private" }

Q3

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

{ "\_id" : ObjectId("60e00339ff08be8427a1a873"), "username" : "GoodGuyGreg", "title" : "Passes out at Party", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60e00346ff08be8427a1a874"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("60e0035bff08be8427a1a875"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a pull request" }

Q4

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

{ "\_id" : ObjectId("60e0036cff08be8427a1a876"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("60e00379ff08be8427a1a877"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end" }

{ "\_id" : ObjectId("60e00383ff08be8427a1a878"), "username" : "ScumbagSteve", "title" : "Forks your repo on github", "body" : "Sets to private" }

Q5

> db.comments.find()

{ "\_id" : ObjectId("60e00415ff08be8427a1a879"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal!", "post" : ObjectId("60e0036cff08be8427a1a876") }

{ "\_id" : ObjectId("60e004a3ff08be8427a1a87a"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "post" : ObjectId("60e00379ff08be8427a1a877") }

{ "\_id" : ObjectId("60e004e6ff08be8427a1a87b"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("60e00383ff08be8427a1a878") }

{ "\_id" : ObjectId("60e0052eff08be8427a1a87c"), "username" : "ScumbagSteve", "comment" : "It still isn't clean", "post" : ObjectId("60e00339ff08be8427a1a873") }

{ "\_id" : ObjectId("60e0056fff08be8427a1a87d"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("60e0035bff08be8427a1a875") }

Q6

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

{ "\_id" : ObjectId("60e00415ff08be8427a1a879"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal!", "post" : ObjectId("60e0036cff08be8427a1a876") }

{ "\_id" : ObjectId("60e004a3ff08be8427a1a87a"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "post" : ObjectId("60e00379ff08be8427a1a877") }

{ "\_id" : ObjectId("60e004e6ff08be8427a1a87b"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("60e00383ff08be8427a1a878") }

Q7

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

{ "\_id" : ObjectId("60e0052eff08be8427a1a87c"), "username" : "ScumbagSteve", "comment" : "It still isn't clean", "post" : ObjectId("60e00339ff08be8427a1a873") }

{ "\_id" : ObjectId("60e0056fff08be8427a1a87d"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("60e0035bff08be8427a1a875") }

Q8

db.comments.find({post: db.posts.findOne({title: "Reports a bug in your code"}).\_id})

{ "\_id" : ObjectId("60e0056fff08be8427a1a87d"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("60e0035bff08be8427a1a875") }