**ASSIGNMENT – 1 – MongoDB**

**INSERT DOCUMENT :**

show dbs

admin 0.000GB

config 0.000GB

local 0.000GB

> use mongo\_practice

switched to db mongo\_practice

> db.createCollection("Movies")

{ "ok" : 1 }

> show collections

Movies

db.movies.insertOne({title:"fight club",writer:"chuck palahniuko",year:1999,actors:["brad pitt","edward norton"]})

db.movies.find().pretty()

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"),

"title" : "fight club",

"writer" : "chuck palahniuko",

"year" : 1999,

"actors" : [

"brad pitt",

"edward norton"

]

}

db.movies.insertMany([{tile:"pulp fiction",writer:"quentin tarantino",year:1994,actors:["john travolta","uma thurman"]},{title:"inglorious basterds",writer:"quentin tarantino",year:2009,actors:["brad pitt","diane kruger","eli roth"]}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("6107949ecb9d7f38b48360bf"),

ObjectId("6107949ecb9d7f38b48360c0")

]

}

db.movies.insertMany([{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"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("61079800cb9d7f38b48360c1"),

ObjectId("61079800cb9d7f38b48360c2")

]

}

> db.movies.insertMany([{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("61079f7ccb9d7f38b48360c3")

]

}

> db.movies.insertMany([{title:"pee wee herman's big adventure"},{title:"avatar"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("61079fe4cb9d7f38b48360c4"),

ObjectId("61079fe4cb9d7f38b48360c5")

]

}

**QUERY AND ALL DOCUMENTS :**

Q1.

db.movies.find()

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360c0"), "title" : "inglorious basterds", "writer" : "quentin tarantino", "year" : 2009, "actors" : [ "brad pitt", "diane kruger", "eli roth" ] }

{ "\_id" : ObjectId("61079800cb9d7f38b48360c1"), "title" : "the hobbit:An Unexpected Journey", "writer" : "J.R.R.tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("61079800cb9d7f38b48360c2"), "title" : "the hobbit:the desolation of smaug", "writer" : "J.R.R.tolkein", "year" : 2013, "franchise" : "the hobbit" }

{ "\_id" : ObjectId("61079f7ccb9d7f38b48360c3"), "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("61079fe4cb9d7f38b48360c4"), "title" : "pee wee herman's big adventure" }

{ "\_id" : ObjectId("61079fe4cb9d7f38b48360c5"), "title" : "avatar" }

Q.2

db.movies.find({writer:"quentin tarantino"})

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360c0"), "title" : "inglorious basterds", "writer" : "quentin tarantino", "year" : 2009, "actors" : [ "brad pitt", "diane kruger", "eli roth" ] }

Q.3

db.movies.find({actors:{$eq:"brad pitt"}})

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360c0"), "title" : "inglorious basterds", "writer" : "quentin tarantino", "year" : 2009, "actors" : [ "brad pitt", "diane kruger", "eli roth" ] }

Q.4

db.movies.find({franchise:{$eq:"the hobbit"}})

{ "\_id" : ObjectId("61079800cb9d7f38b48360c2"), "title" : "the hobbit:the desolation of smaug", "writer" : "J.R.R.tolkein", "year" : 2013, "franchise" : "the hobbit" }

{ "\_id" : ObjectId("61079f7ccb9d7f38b48360c3"), "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" }

Q.5.

db.movies.find({year:{$lt:2000}})

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman" ] }

Q.6.

> db.movies.find({year:{$lt:2000}})

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman" ] }

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

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman" ] }

{ "\_id" : ObjectId("61079800cb9d7f38b48360c1"), "title" : "the hobbit:An Unexpected Journey", "writer" : "J.R.R.tolkein", "year" : 2012, "franchise" : "The Hobbit" }

{ "\_id" : ObjectId("61079800cb9d7f38b48360c2"), "title" : "the hobbit:the desolation of smaug", "writer" : "J.R.R.tolkein", "year" : 2013, "franchise" : "the hobbit" }

{ "\_id" : ObjectId("61079f7ccb9d7f38b48360c3"), "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 :**

Q.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 }

> db.movies.find({title:"the hobbit:An Unexpected Journey"})

{ "\_id" : ObjectId("61079800cb9d7f38b48360c1"), "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" }

Q.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 }

> db.movies.find({title:"the hobbit:the desolation of smaug"})

{ "\_id" : ObjectId("61079800cb9d7f38b48360c2"), "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" }

Q.3

db.movies.updateOne({"\_id" : ObjectId("6107949ecb9d7f38b48360bf")},{$push:{actors:"samuel l. jackson"}})

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

> db.movies.find({"\_id" : ObjectId("6107949ecb9d7f38b48360bf")})

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman", "samuel l. jackson" ] }

**TEXT SEARCH**

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

{

"\_id" : ObjectId("61079800cb9d7f38b48360c1"),

"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("61079800cb9d7f38b48360c2"),

"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("61079f7ccb9d7f38b48360c3"),

"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"

}

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

{

"\_id" : ObjectId("61079800cb9d7f38b48360c2"),

"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"

}

Q.3.

db.movies.find({$or:[{synopsis:/dwarves/},{synopsis:/hobbit/}]}).pretty()

{

"\_id" : ObjectId("61079800cb9d7f38b48360c1"),

"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("61079800cb9d7f38b48360c2"),

"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"

}

Q.5

db.movies.find({$and:[{synopsis:/gold/},{synopsis:/dragon/}]}).pretty()

{

"\_id" : ObjectId("61079800cb9d7f38b48360c1"),

"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:**

Q.1

db.movies.remove({title:"pee wee hermen's big adventure"})

WriteResult({ "nRemoved" : 0 })

Q.2

> db.movies.remove({title:"pee wee herman's big adventure"})

WriteResult({ "nRemoved" : 1 })

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

WriteResult({ "nRemoved" : 1 })

> db.movies.find()

{ "\_id" : ObjectId("610789d4cb9d7f38b48360be"), "title" : "fight club", "writer" : "chuck palahniuko", "year" : 1999, "actors" : [ "brad pitt", "edward norton" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360bf"), "tile" : "pulp fiction", "writer" : "quentin tarantino", "year" : 1994, "actors" : [ "john travolta", "uma thurman", "samuel l. jackson" ] }

{ "\_id" : ObjectId("6107949ecb9d7f38b48360c0"), "title" : "inglorious basterds", "writer" : "quentin tarantino", "year" : 2009, "actors" : [ "brad pitt", "diane kruger", "eli roth" ] }

{ "\_id" : ObjectId("61079800cb9d7f38b48360c1"), "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("61079800cb9d7f38b48360c2"), "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("61079f7ccb9d7f38b48360c3"), "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" }

**RELATIONSHIPS:**

Q.1

db.users.insertMany([{username:"goodguygreg",first\_name:"good guy",last\_name:"greg"},{username:"scumbag steve",full\_name:[{first:"scumbag"},{last:"steve"}]}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("6107c929cb9d7f38b48360c6"),

ObjectId("6107c929cb9d7f38b48360c7")

]

}

> db.users.find()

{ "\_id" : ObjectId("6107c929cb9d7f38b48360c6"), "username" : "goodguygreg", "first\_name" : "good guy", "last\_name" : "greg" }

{ "\_id" : ObjectId("6107c929cb9d7f38b48360c7"), "username" : "scumbag steve", "full\_name" : [ { "first" : "scumbag" }, { "last" : "steve" } ] }

Q.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"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("6107cd44cb9d7f38b48360c8"),

ObjectId("6107cd44cb9d7f38b48360c9")

]

}

> db.posts.insertMany([{username: "GoodGuyGreg",title: "Reports a bug in your code",body: "Sends you a Pull Request"},{username: "Scumbag Steve",title : "Borrows something",body: "Sells it"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("6107cdcecb9d7f38b48360ca"),

ObjectId("6107cdcecb9d7f38b48360cb")

]

}

> db.posts.insertMany([{username: "Scumbag Steve", title : "Borrows everything",body: "The end"},{username: "ScumbagSteve", title: "Forks your repo on github",body: "Sets to private"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("6107ce4ecb9d7f38b48360cc"),

ObjectId("6107ce4ecb9d7f38b48360cd")

]

}

> db.posts.find()

{ "\_id" : ObjectId("6107cd44cb9d7f38b48360c8"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house" }

{ "\_id" : ObjectId("6107cd44cb9d7f38b48360c9"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("6107cdcecb9d7f38b48360ca"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a Pull Request" }

{ "\_id" : ObjectId("6107cdcecb9d7f38b48360cb"), "username" : "Scumbag Steve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("6107ce4ecb9d7f38b48360cc"), "username" : "Scumbag Steve", "title" : "Borrows everything", "body" : "The end" }

{ "\_id" : ObjectId("6107ce4ecb9d7f38b48360cd"), "username" : "ScumbagSteve", "title" : "Forks your repo on github", "body" : "Sets to private" }

Q.3.

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

{ "\_id" : ObjectId("6107cd44cb9d7f38b48360c8"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house" }

{ "\_id" : ObjectId("6107cd44cb9d7f38b48360c9"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score" }

{ "\_id" : ObjectId("6107cdcecb9d7f38b48360ca"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a Pull Request" }

Q.4

db.posts.find({username:"Scumbag Steve"})

{ "\_id" : ObjectId("6107cdcecb9d7f38b48360cb"), "username" : "Scumbag Steve", "title" : "Borrows something", "body" : "Sells it" }

{ "\_id" : ObjectId("6107ce4ecb9d7f38b48360cc"), "username" : "Scumbag Steve", "title" : "Borrows everything", "body" : "The end" }

Q.5

db.comments.find()

{ "\_id" : ObjectId("6107d474cb9d7f38b48360ce"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal", "post" : ObjectId("6107cdcecb9d7f38b48360cb") }

{ "\_id" : ObjectId("6107d474cb9d7f38b48360cf"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "Post" : ObjectId("6107ce4ecb9d7f38b48360cc") }

{ "\_id" : ObjectId("6107d582cb9d7f38b48360d0"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("6107ce4ecb9d7f38b48360cd") }

{ "\_id" : ObjectId("6107d582cb9d7f38b48360d1"), "username" : "Scumbag Steve", "comment" : " It still isn't clean", "post" : ObjectId("6107cd44cb9d7f38b48360c8") }

{ "\_id" : ObjectId("6107d611cb9d7f38b48360d2"), "username" : "Scumbag Steve", "comment" : " Denied your PR cause I found a hack", "post" : ObjectId("6107cdcecb9d7f38b48360ca") }

Q.6

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

{ "\_id" : ObjectId("6107d474cb9d7f38b48360ce"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal", "post" : ObjectId("6107cdcecb9d7f38b48360cb") }

{ "\_id" : ObjectId("6107d474cb9d7f38b48360cf"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "Post" : ObjectId("6107ce4ecb9d7f38b48360cc") }

{ "\_id" : ObjectId("6107d582cb9d7f38b48360d0"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("6107ce4ecb9d7f38b48360cd") }

Q.7

db.comments.find({username:"Scumbag Steve"})

{ "\_id" : ObjectId("6107d582cb9d7f38b48360d1"), "username" : "Scumbag Steve", "comment" : " It still isn't clean", "post" : ObjectId("6107cd44cb9d7f38b48360c8") }

{ "\_id" : ObjectId("6107d611cb9d7f38b48360d2"), "username" : "Scumbag Steve", "comment" : " Denied your PR cause I found a hack", "post" : ObjectId("6107cdcecb9d7f38b48360ca") }

Q.8.

db.comments.find({post:ObjectId("6107cdcecb9d7f38b48360ca")})

{ "\_id" : ObjectId("6107d611cb9d7f38b48360d2"), "username" : "ScumbagSteve", "comment" : " Denied your PR cause I found a hack", "post" : ObjectId("6107cdcecb9d7f38b48360ca") }