

MONGODB ASSIGNMENT-1

Name: Shruti Bhosale

1) Query Find Document

```
> use mongo_practice
switched to db mongo_practice
> db.collection.insert([
... {
...   title : "Fight Club",
...   writer : "Chuck Palahniuk",
...   year : 1999,
...   actors : [
...     "Brad Pitt",
...     "Edward Norton",
...   ]
... },
...
... {
...   title : "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",
...   ]
... },
...
... {
...   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.",
... },
... {
...   title : "Pee Wee Herman's Big Adventure"
... },
... {
...   title : "Avatar"
... }
... ])
```

```

> db.collection.find().pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e81"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e82"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e83"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}

```

```

{
  "id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "id" : ObjectId("61051e72ef14e84ae0fb2e86"),
  "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("61051e72ef14e84ae0fb2e87"),
  "title" : "Pee Wee Herman's Big Adventure"
}
{ "_id" : ObjectId("61051e72ef14e84ae0fb2e88"), "title" : "Avatar" }
>

```

```

> db.collection.find({writer:"Quentin Tarantino"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e82"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e83"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
>

```

```

> db.collection.find({"actors":"Brad Pitt"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e81"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e83"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
>

```

```

> db.collection.find({franchise:"The Hobbit"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkien",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkien",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e86"),
  "title" : "The Hobbit: The Battle of the 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 a r
}
>

```

```

> db.collection.find({year: {$gte: 1990, $lte: 1999}}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e81"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e82"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
>

```

```

> db.collection.find({$or:[{year:{$lte:2000}}, {year:{$gte:2010}}]}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e81"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e82"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e86"),
  "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
"
}
>

```

2)Update Documents

```

> db.collection.update({title: "Pulp Fiction"}, {$push: {actors: "Samuel L. Jackson"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.collection.find({title: "Pulp Fiction"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e82"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman",
    "Samuel L. Jackson"
  ]
}
>

```

```
> db.collection.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.collection.find({title: "The Hobbit: The Desolation of Smaug"}).pretty()
uncaught exception: TypeError: db.collection.find is not a function :
@(shell):1:1
> db.collection.find({title: "The Hobbit: The Desolation of Smaug"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "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."
}
```

```
> db.collection.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.collection.find({title: "The Hobbit: An Unexpected Journey"}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "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."
}
```


3)Test Search

```
> db.collection.find({synopsis: /.Bilbo./}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "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("61051e72ef14e84ae0fb2e85"),
  "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."
}
> db.collection.find({synopsis: /.Gandalf./}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e85"),
  "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."
}
> db.collection.find({$and: [{synopsis: /.Bilbo./}, {synopsis: /.^Gandalf./}]}).pretty()
> db.collection.find({$and: [{synopsis: /Bilbo/}, {synopsis: {$not: /Gandalf/}}]}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit",
  "synopsis" : "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."
}
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e86"),
  "title" : "The Hobbit: The Battle of the Five Armies",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit",
  "synopsis" : "Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness."
}
>
> db.collection.find({$or: [{synopsis: /dwarves/}, {synopsis: /hobbit/}]}).pretty()
{
  "_id" : ObjectId("61051e72ef14e84ae0fb2e84"),
  "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("61051e72ef14e84ae0fb2e85"),
  "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."
}
>
```

4)Delete Documents

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

5) Querying Related Collection

```
> db.users.insert([
... {
...   username : "GoodGuyGreg",
...   first_name : "Good Guy",
...   last_name : "Greg"
... },
... {
...   username : "ScumbagSteve",
...   full_name : {
...     first : "Scumbag",
...     last : "Steve",
...   }
... }
... ])
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 2,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
```



```
> db.posts.insert([
... {
...   _id: 1,
...   username : "GoodGuyGreg",
...   title : "Passes out at party",
...   body : "Wakes up early and cleans house",
... },
...
... {
...   _id: 2,
...   username : "GoodGuyGreg",
...   title : "Steals your identity",
...   body : "Raises your credit score",
... },
...
... {
...   _id: 3,
...   username : "GoodGuyGreg",
...   title : "Reports a bug in your code",
...   body : "Sends you a Pull Request",
... },
...
... {
...   _id: 4,
...   username : "ScumbagSteve",
...   title : "Borrows something",
...   body : "Sells it",
... },
...
... {
...   _id: 5,
...   username : "ScumbagSteve",
...   title : "Borrows everything",
...   body : "The end",
... },
...
... {
...   _id: 6,
...   username : "ScumbagSteve",
...   title : "Forks your repo on github",
...   body : "Sets to private",
... },
... ])
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 6,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
```

```

> db.comments.insert([
... {
... username : "GoodGuyGreg",
... comment : "Hope you got a good deal!",
... post : 4,
... },
... {
... username : "GoodGuyGreg",
... comment : "What's mine is yours!",
... post : 5,
... },
... {
... username : "GoodGuyGreg",
... comment : "Don't violate the licensing agreement!",
... post : 6,
... },
... {
... username : "ScumbagSteve",
... comment : "It still isn't clean",
... post : 1,
... },
... {
... username : "ScumbagSteve",
... comment : "Denied your PR cause I found a hack",
... post : 3
... },
... ])
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 5,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>

```

```
> db.users.find({}).pretty()
{
  "_id" : ObjectId("61052834ef14e84ae0fb2e89"),
  "username" : "GoodGuyGreg",
  "first_name" : "Good Guy",
  "last_name" : "Greg"
}
{
  "_id" : ObjectId("61052834ef14e84ae0fb2e8a"),
  "username" : "ScumbagSteve",
  "full_name" : {
    "first" : "Scumbag",
    "last" : "Steve"
  }
}
> db.posts.find({}).pretty()
{
  "_id" : 1,
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",
  "body" : "Wakes up early and cleans house"
}
{
  "_id" : 2,
  "username" : "GoodGuyGreg",
  "title" : "Steals your identity",
  "body" : "Raises your credit score"
}
{
  "_id" : 3,
  "username" : "GoodGuyGreg",
  "title" : "Reports a bug in your code",
  "body" : "Sends you a Pull Request"
}
{
  "_id" : 4,
  "username" : "ScumbagSteve",
  "title" : "Borrows something",
  "body" : "Sells it"
}
{
  "_id" : 5,
  "username" : "ScumbagSteve",
  "title" : "Borrows everything",
  "body" : "The end"
}
{
  "_id" : 6,
  "username" : "ScumbagSteve",
  "title" : "Forks your repo on github",

```

```
> db.posts.find({username: "GoodGuyGreg"}).pretty()
{
  "_id" : 1,
  "username" : "GoodGuyGreg",
  "title" : "Passes out at party",
  "body" : "Wakes up early and cleans house"
}
{
  "_id" : 2,
  "username" : "GoodGuyGreg",
  "title" : "Steals your identity",
  "body" : "Raises your credit score"
}
{
  "_id" : 3,
  "username" : "GoodGuyGreg",
  "title" : "Reports a bug in your code",
  "body" : "Sends you a Pull Request"
}
>
```

```
> db.posts.find({username: "ScumbagSteve"}).pretty()
{
  "_id" : 4,
  "username" : "ScumbagSteve",
  "title" : "Borrows something",
  "body" : "Sells it"
}
{
  "_id" : 5,
  "username" : "ScumbagSteve",
  "title" : "Borrows everything",
  "body" : "The end"
}
{
  "_id" : 6,
  "username" : "ScumbagSteve",
  "title" : "Forks your repo on github",
  "body" : "Sets to private"
}
>
```

```

> db.comments.find({}).pretty()
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8b"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : 4
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8c"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours!",
  "post" : 5
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8d"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement!",
  "post" : 6
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8e"),
  "username" : "ScumbagSteve",
  "comment" : "It still isn't clean",
  "post" : 1
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8f"),
  "username" : "ScumbagSteve",
  "comment" : "Denied your PR cause I found a hack",
  "post" : 3
}
>

```

```

> db.comments.find({username: "GoodGuyGreg"}).pretty()
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8b"),
  "username" : "GoodGuyGreg",
  "comment" : "Hope you got a good deal!",
  "post" : 4
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8c"),
  "username" : "GoodGuyGreg",
  "comment" : "What's mine is yours!",
  "post" : 5
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8d"),
  "username" : "GoodGuyGreg",
  "comment" : "Don't violate the licensing agreement!",
  "post" : 6
}
>

```

```
> db.comments.find({username: "ScumbagSteve"}).pretty()
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8e"),
  "username" : "ScumbagSteve",
  "comment" : "It still isn't clean",
  "post" : 1
}
{
  "_id" : ObjectId("61052872ef14e84ae0fb2e8f"),
  "username" : "ScumbagSteve",
  "comment" : "Denied your PR cause I found a hack",
  "post" : 3
}
```

```
> db.posts.find({ title : "Reports a bug in your code"}).pretty()
{
  "_id" : 3,
  "username" : "GoodGuyGreg",
  "title" : "Reports a bug in your code",
  "body" : "Sends you a Pull Request"
}
>
```