INSERT Query

- db.COLLECTION_NAME.insertone({document})
- insertMany([{document},{document},...])

```
mongosh mongodb+srv://samplecluster.2pkxf.mongodb.net/mongo_practice
```

FIND Query

1. get all documents

db.movies.find()

```
tlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find()
     _id: ObjectId("6175185597992d1830bebf11"),
   title: 'Fight Club',
writer: 'Chuck Palahniuko',
year: 1999,
    year: 1999,
actors: [ 'Brad Pitt', 'Edward Norton' ]
     id: ObjectId("6175185597992d1830bebf12"),
   _id: Objected, while:
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' ]
   _id: ObjectId("6175185597992d1830bebf14"), title: 'The Hobbit: An Unexpected Journey'
    title: 'The Hobbit: An Une
writer: 'J.R.R. Tolkein',
    year: 2012,
franchise: 'The Hobbit'
      id: ObjectId("6175185597992d1830bebf15"),
   title: 'The Hobbit: The De
writer: 'J.R.R. Tolkein',
year: 2013,
franchise: 'The Hobbit'
     id: ObjectId("6175185597992d1830bebf16"),
   _id: ObjectId("61/518559/5
title: 'The Hobbit: The Ba
writer: 'J.R.R. Tolkein',
year: 2012,
franchise: 'The Hobbit',
synopsis: 'Bilbo and Compa
   _id: ObjectId("6175185597992d1830bebf17"),
title: "Pee Wee Herman's Big Adventure"
    _id: ObjectId("6175185597992d1830bebf18"), title: 'Avatar' }
```

- 2. get all documents with writer set to "Quentin Tarantino"
 - db.movies.find({"writer":{\$in: ["Quentin Tarantino"]}})
- 3. get all documents where actors include "Brad Pitt"
 - db.movies.find({"actors":{\$in: ["Brad Pitt"]}})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find({"writer":{$in: ["Quentin Tarantino"]}})
     _id: ObjectId("6175185597992d1830bebf12"),
    title: 'Pulp Fiction',
    writer: 'Quentin Tarantino',
    year: 1994,
    actors: [ 'John Travolta', 'Uma Thurman' ]
     id: ObjectId("6175185597992d1830bebf13"),
    writer: 'Quentin Tarantino',
    actors: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find({"actors":{$in: ["Brad Pitt"]}})
     id: ObjectId("6175185597992d1830bebf11"),
    title: 'Fight Club',
writer: 'Chuck Palahniuko',
year: 1999,
    actors: [ 'Brad Pitt', 'Edward Norton' ]
     id: ObjectId("6175185597992d1830bebf13"),
    writer: 'Quentin Tarantino',
    year: 2009,
actors: [ 'Brad Pitt', 'Diane Kruger', 'Eli Roth' ]
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```

- 4. get all documents with franchise set to "The Hobbit"
 - db.movies.find({"franchise":"The Hobbit"})

- 5. get all movies released in the 90s
 - db.movies.find({\$and: [{"year":{\$gte:1990}},{"year":{\$lte:1999}}]})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find({$and: [{"year":{$gte:1990}}},{"year":{$lte:1999}}]})

{
    _id: ObjectId("6175185597992d1830bebf11"),
    title: 'Fight Club',
    writer: 'Chuck Palahniuko',
    year: 1999,
    actors: [ 'Brad Pitt', 'Edward Norton' ]
    },
    {
     _id: ObjectId("6175185597992d1830bebf12"),
        title: 'Pulp Fiction',
        writer: 'Quentin Tarantino',
        year: 1994,
        actors: [ 'John Travolta', 'Uma Thurman' ]
    }
}
```

- 6. get all movies released before the year 2000 or after 2010
 - db.movies.find({\$or: [{"year":{\$lt:2000}},{"year":{\$gt:2010}}]})

UPDATE Query

- add a synopsis to "The Hobbit: An Unexpected Journey": "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."
 - b db.movies.findOneAndUpdate({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.'}})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.findOneAndUpdate({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.'}}) 
{
    _id: ObjectId("6175185597992d1830bebf14"),
    title: 'The Hobbit: An Unexpected Journey',
    writer: 'J.R.R. Tolkein',
    year: 2012,
    franchise: 'The Hobbit'
}
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find({"title":"The Hobbit: An Unexpected Journey"})

[
    _id: ObjectId("6175185597992d1830bebf14"),
        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 re
claim their mountain home - and the gold within it - from the dragon Smaug.'
}
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```

- 2. add a synopsis to "The Hobbit: The Desolation of Smaug": "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."
 - b.movies.findOneAndUpdate({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.'}})

3. add an actor named "Samuel L. Jackson" to the movie "Pulp Fiction" db.movies.findOneAndUpdate({title: 'Pulp Fiction'},{\$push:{actors: 'Samuel L. Jackson'}})

Text Search

- 1. find all movies that have a synopsis that contains the word "Bilbo"
 - db.movies.createIndex({synopsis:"text"})
 - b db.movies.find({\$text:{\$search:"Bilbo"}})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.createIndex({synopsis:"text"})
synopsis text
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.find({$text:{$search:"Bilbo"}})
    id: ObjectId("6175185597992d1830bebf15"),
   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 reci
 },
    id: ObjectId("6175185597992d1830bebf16"),
   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
    _id: ObjectId("6175185597992d1830bebf14"),
   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
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> 🕳
```

- 2. find all movies that have a synopsis that contains the word "Gandalf"
 - db.movies.find({\$text:{\$search:" Gandalf "}})

- 3. find all movies that have a synopsis that contains the word "Bilbo" and not the word "Gandalf"
 - db.movies.find({ \$text: { \$search: "Bilbo -Gandalf" } })

- 4. find all movies that have a synopsis that contains the word "dwarves" or "hobbit"
 - db.movies.find({ \$text: { \$search: " dwarves hobbit " } })
 - db.movies.find({\$or:[{synopsis:{\$regex:"dwarves"}}, {synopsis:{\$regex:"hobbit"}}]})

- 5. find all movies that have a synopsis that contains the word "gold" and "dragon"
 - db.movies.find({ \$text: { \$search: "\"gold\" \"dragon\"" } })

Delete Documents

- 1. delete the movie "Avatar"
 - db.movies.deleteOne({ title: "Avatar"})
- 2. delete the movie "Pee Wee Herman's Big Adventure"
 - db.movies.deleteOne({ title: " Pee Wee Herman's Big Adventure "})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.deleteOne( { title: "Avatar"} )
{ acknowledged: true, deletedCount: 1 }
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.remove( { title: "Pee Wee Herman's Big Adventure"} )
{ acknowledged: true, deletedCount: 1 }
```

Relationships

- 1. find all users
 - db.users.find()

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.users.find()

{
    _id: ObjectId("61754dae97992d1830bebf19"),
    username: 'GoodGuyGreg',
    first_name: 'Good Guy',
    last_name: 'Greg'
},

{
    _id: ObjectId("61754dae97992d1830bebf1a"),
    username: 'ScumbagSteve',
    full_name: { first: 'Scumbag', last: 'Steve' }
}

]
```

2. find all posts

db.posts.find()

```
Atlas atlas-1483qj-shard-0 [primary] mongo practice> db.posts.find()
    _id: ObjectId("61754fb097992d1830bebf1b"),
   username: 'GoodGuyGreg',
   title: 'Passes out at party',
   body: 'Wakes up early and cleans house'
 },
   _id: ObjectId("61754fb097992d1830bebf1c"),
   username: 'GoodGuyGreg',
   title: 'Steals your identity',
   body: 'Raises your credit score'
 },
    _id: ObjectId("61754fb097992d1830bebf1d"),
   username: 'GoodGuyGreg',
   title: 'Reports a bug in your code',
   body: 'Sends you a Pull Request'
 },
   _id: ObjectId("61754fb097992d1830bebf1e"),
   username: 'ScumbagSteve',
   title: 'Borrows something',
   body: 'Sells it'
 },
    _id: ObjectId("61754fb097992d1830bebf1f"),
   username: 'ScumbagSteve',
   title: 'Borrows everything',
   body: 'The end'
 },
   _id: ObjectId("61754fb097992d1830bebf20"),
   username: 'ScumbagSteve',
   title: 'Forks your repo on github',
   body: 'Sets to private'
```

- 3. find all posts that was authored by "GoodGuyGreg"
 - db.posts.find({username:"GoodGuyGreg"})
- 4. find all posts that was authored by "ScumbagSteve"
 - db.posts.find({username:"ScumbagSteve"})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.posts.find({<mark>username:</mark>"GoodGuyGreg"})
     _id: ObjectId("61754fb097992d1830bebf1b"),
    username: 'GoodGuyGreg',
    title: 'Passes out at party',
    body: 'Wakes up early and cleans house'
    _id: ObjectId("61754fb097992d1830bebf1c"),
    username: 'GoodGuyGreg',
    title: 'Steals your identity',
    body: 'Raises your credit score'
    _id: ObjectId("61754fb097992d1830bebf1d"),
    username: 'GoodGuyGreg',
title: 'Reports a bug in your code',
    body: 'Sends you a Pull Request'
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.posts.find({username:"ScumbagSteve"})
    _id: ObjectId("61754fb097992d1830bebf1e"),
    username: 'ScumbagSteve',
    title: 'Borrows something',
    body: 'Sells it'
    _id: ObjectId("61754fb097992d1830bebf1f"),
    username: 'ScumbagSteve',
    title: 'Borrows everything', body: 'The end'
    _id: ObjectId("61754fb097992d1830bebf20"),
    username: 'ScumbagSteve',
    title: 'Forks your repo on github',
    body: 'Sets to private'
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> 🕳
```

5. find all comments

db.comments.find()

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.comments.find()
    _id: ObjectId("6175537097992d1830bebf21"),
    username: 'GoodGuyGreg',
    comment: 'Hope you got a good deal!',
    post: ObjectId("61754fb097992d1830bebf1e")
    _id: ObjectId("6175537097992d1830bebf22"),
    username: 'GoodGuyGreg',
    comment: "What's mine is yours!",
    post: ObjectId("61754fb097992d1830bebf1f")
    _id: ObjectId("6175537097992d1830bebf23"),
    username: 'GoodGuyGreg',
    comment: "Don't violate the licensing agreement!",
    post: ObjectId("61754fb097992d1830bebf20")
    _id: ObjectId("6175537097992d1830bebf24"),
    username: 'ScumbagSteve',
    comment: "It still isn't clean",
    post: ObjectId("61754fb097992d1830bebf1b")
  },
    _id: ObjectId("6175537097992d1830bebf25"),
   username: 'ScumbagSteve',
comment: 'Denied your PR cause I found a hack',
    post: ObjectId("61754fb097992d1830bebf1d")
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```

- 6. find all comments that was authored by "GoodGuyGreg"
 - db.comments.find({username:"GoodGuyGreg"})
- 7. find all comments that was authored by "ScumbagSteve"
 - db.comments.find({username:"ScumbagSteve"})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.comments.find({username:"GoodGuyGreg"})
    _id: ObjectId("6175537097992d1830bebf21"),
    username: 'GoodGuyGreg',
    comment: 'Hope you got a good deal!'
    post: ObjectId("61754fb097992d1830bebf1e")
    _id: ObjectId("6175537097992d1830bebf22"),
    username: 'GoodGuyGreg',
    comment: "What's mine is yours!"
    post: ObjectId("61754fb097992d1830bebf1f")
    _id: ObjectId("6175537097992d1830bebf23"),
    username: 'GoodGuyGreg',
comment: "Don't violate the licensing agreement!",
    post: ObjectId("61754fb097992d1830bebf20")
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.comments.find({username:"ScumbagSteve"})
    _id: ObjectId("6175537097992d1830bebf24"),
    username: 'ScumbagSteve',
    comment: "It still isn't clean",
    post: ObjectId("61754fb097992d1830bebf1b")
    _id: ObjectId("6175537097992d1830bebf25"),
    username: 'ScumbagSteve',
    comment: 'Denied your PR cause I found a hack',
    post: ObjectId("61754fb097992d1830bebf1d")
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```

- 8. find all comments belonging to the post "Reports a bug in your code"
 - db.comments.find({post: { \$in: [ObjectId("61754fb097992d1830bebf1d")]}})

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.comments.find({post: { $in: [ObjectId("61754fb097992d1830bebf1d")]}})

{
    _id: ObjectId("6175537097992d1830bebf25"),
    username: 'ScumbagSteve',
    comment: 'Denied your PR cause I found a hack',
    post: ObjectId("61754fb097992d1830bebf1d")
}

Atlas atlas-1483qj-shard-0 [primary] mongo_practice> _
```

mongo_practice //database

movies //collection

```
([
        {
                title: "Fight Club",
                writer: "Chuck Palahniuko",
                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"
       }
```

])

```
mongosh mongodb+srv://samplecluster.2pkxf.mongodb.net/mongo_practice
  :\Users\PriyankaY Workspace>mongosh "mongodb+srv://samplecluster.2pkxf.mongodb.net/mongo_practice" --username DB_USER13
nter password: *******
 Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.movies.insertMany([{
... title : "Fight Club",
... writer : "Chuck Palahniuko",
... 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.
```

Users //collection

```
])
      {
            username: "GoodGuyGreg",
            first_name: "Good Guy",
            last_name: "Greg"
      },
      {
            username: "ScumbagSteve",
            full_name:
                   {
                         first: "Scumbag",
                         last: "Steve"
                   }
      }
])
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.createCollection("users")
{ ok: 1 }
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.users.insertMany([{
                 username : "GoodGuyGreg",
                 first_name : "Good Guy",
                 last name : "Greg"
        },
                 username : "ScumbagSteve",
                 full name :
                                           first : "Scumbag",
                                           last : "Steve"
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("61754dae97992d1830bebf19"),
    '1': ObjectId("61754dae97992d1830bebf1a")
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> _
```

Posts //collection

```
([
        {
                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"
        }
])
```

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.createCollection("posts")
Atlas atlas-1483qj-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("61754fb097992d1830bebf1b"),
    '1': ObjectId("61754fb097992d1830bebf1c"),
    '2': ObjectId("61754fb097992d1830bebf1d"),
    '3': ObjectId("61754fb097992d1830bebf1e"),
    '4': ObjectId("61754fb097992d1830bebf1f"),
    '5': ObjectId("61754fb097992d1830bebf20")
  }
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```

Comments //collection

```
])
       {
               username: "GoodGuyGreg",
               comment: "Hope you got a good deal!",
               post: ObjectId("61754fb097992d1830bebf1e")
       },
       {
               username: "GoodGuyGreg",
               comment: "What's mine is yours!",
               post : ObjectId("61754fb097992d1830bebf1f")
       },
       {
               username: "GoodGuyGreg",
               comment: "Don't violate the licensing agreement!",
               post : ObjectId("61754fb097992d1830bebf20")
       },
       {
               username: "ScumbagSteve",
               comment: "It still isn't clean",
               post: ObjectId("61754fb097992d1830bebf1b")
       },
       {
               username: "ScumbagSteve",
               comment: "Denied your PR cause I found a hack",
               post : ObjectId("61754fb097992d1830bebf1d")
       }
])
```

```
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.createCollection("comments")
{ ok: 1 }
Atlas atlas-1483qj-shard-0 [primary] mongo_practice> db.comments.insertMany([{
                username : "GoodGuyGreg",
                comment : "Hope you got a good deal!",
                post : ObjectId("61754fb097992d1830bebf1e")
                username : "GoodGuyGreg",
                comment : "What's mine is yours!",
                post : ObjectId("61754fb097992d1830bebf1f")
                username : "GoodGuyGreg",
                comment : "Don't violate the licensing agreement!",
                post : ObjectId("61754fb097992d1830bebf20")
                username : "ScumbagSteve",
                comment : "It still isn't clean",
                post : ObjectId("61754fb097992d1830bebf1b")
                username : "ScumbagSteve",
                comment : "Denied your PR cause I found a hack",
                post : ObjectId("61754fb097992d1830bebf1d")
        }
...])
 acknowledged: true,
 insertedIds: {
    '0': ObjectId("6175537097992d1830bebf21"),
    '1': ObjectId("6175537097992d1830bebf22"),
    '2': ObjectId("6175537097992d1830bebf23"),
    '3': ObjectId("6175537097992d1830bebf24"),
    '4': ObjectId("6175537097992d1830bebf25")
Atlas atlas-1483qj-shard-0 [primary] mongo_practice>
```