

NodeJS Practical – 4

- **Question : 1**

- **1.1) Insert documents in to the movies collection.**

- **Command :**

```
db.movies.insertMany([
  {
    "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": "Avatar"
  },
],
```

```

    {
      "title": "Pee Wee Herman's Big Adventure"
    }
  ]
})

```

- **1.2.1) Get all the documents.**

- Command : `db.movies.find().pretty()`

- O/P :

```

{
  "_id" : ObjectId("6228ba51c111752e5b4f75c2"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c3"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c4"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}
{
  "_id" : ObjectId("6228bb8dc111752e5b4f75c6"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bbabc111752e5b4f75c7"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bc5da39598be9b6ad5b2"),
  "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("6228bc79a39598be9b6ad5b3"),
    "title" : "Avatar"
  }
  {
    "_id" : ObjectId("6228bc79a39598be9b6ad5b4"),
    "title" : "Pee Wee Herman's Big Adventure"
  }
}

```

- **1.2.2) Get all the documents with ‘writer’ set to ‘Quentin Tarantino’.**

- Command : `db.movies.find({writer: "Quentin Tarantino"}).pretty()`

- O/P :

```

{
  "_id" : ObjectId("6228ba51c111752e5b4f75c3"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c4"),
  "title" : "Inglorious Basterds",
  "writer" : "Quentin Tarantino",
  "year" : 2009,
  "actors" : [
    "Brad Pitt",
    "Diane Kruger",
    "Eli Roth"
  ]
}

```

- **1.2.3) Get all the documents where ‘actor’ include ‘Brad Pitt’.**

- Command : `db.movies.find({actors: {$in : ["Brad Pitt"]}}).pretty()`

- O/P :

```

{
  "_id" : ObjectId("6228ba51c111752e5b4f75c2"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c4"),

```

```

        "title" : "Inglorious Basterds",
        "writer" : "Quentin Tarantino",
        "year" : 2009,
        "actors" : [
            "Brad Pitt",
            "Diane Kruger",
            "Eli Roth"
        ]
    }
}

```

- **1.2.4) Get all the documents with ‘franchise’ set to ‘The Hobbit’ .**

- Command : `db.movies.find({franchise: "Quentin Tarantino"}).pretty()`

- O/P :

```

{
  "_id" : ObjectId("6228bb8dc111752e5b4f75c6"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bbabc111752e5b4f75c7"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bc5da39598be9b6ad5b2"),
  "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."
}

```

- **1.2.5) Get movies released in 90s .**

- Command : `db.movies.find({year: {$gt: 1990, $lt: 2000}}).pretty()`

- O/P :

```

{
  "_id" : ObjectId("6228ba51c111752e5b4f75c2"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c3"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,

```

```

        "actors" : [
            "John Travolta",
            "Uma Thurman"
        ]
    }
}

```

- **1.2.6) Get all movies released before the year 2000 or after 2010.**

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

- O/P :

```

{
  "_id" : ObjectId("6228ba51c111752e5b4f75c2"),
  "title" : "Fight Club",
  "writer" : "Chuck Palahniuk",
  "year" : 1999,
  "actors" : [
    "Brad Pitt",
    "Edward Norton"
  ]
}
{
  "_id" : ObjectId("6228ba51c111752e5b4f75c3"),
  "title" : "Pulp Fiction",
  "writer" : "Quentin Tarantino",
  "year" : 1994,
  "actors" : [
    "John Travolta",
    "Uma Thurman"
  ]
}
{
  "_id" : ObjectId("6228bb8dc111752e5b4f75c6"),
  "title" : "The Hobbit: An Unexpected Journey",
  "writer" : "J.R.R. Tolkein",
  "year" : 2012,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bbabc111752e5b4f75c7"),
  "title" : "The Hobbit: The Desolation of Smaug",
  "writer" : "J.R.R. Tolkein",
  "year" : 2013,
  "franchise" : "The Hobbit"
}
{
  "_id" : ObjectId("6228bc5da39598be9b6ad5b2"),
  "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."
}

```

- **1.3.1) 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."**
 - Command :
`db.movies.updateOne({title: "The Hobbit: An Unexpected Journey"}, {$set: {synopsis: "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited group of dwarves to reclaim their mountain home - and the gold within it - from the dragon Smaug."}})`
 - O/P :
`{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }`
- **1.3.2) Add a synopsis to "The Hobbit: The Desolation of Smaug" : "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring."**
 - Command :
`db.movies.updateOne({title: "The Hobbit: The Desolation of Smaug"}, {$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."}})`
 - O/P :
`{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }`
- **1.3.3) Add an actor named "Samuel L. Jackson" to the movie "Pulp Fiction".**
 - Command :
`db.movies.updateOne({title: "Pulp Fiction"}, {$set: {$push: { actors: "Samuel L. Jackson"}}})`
 - O/P :
`{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }`
- **1.4.1) Find all movies that have a synopsis and contains the word "Bilbo".**
 - Command :
`db.movies.createIndex({ synopsis: "text" })
db.movies.find({ $text: { $search : "Bilbo" } }).pretty()`

○ O/P :

```
{
  "_id" : ObjectId("6228bbabc111752e5b4f75c7"),
  "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("6228bc5da39598be9b6ad5b2"),
  "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("6228bb8dc111752e5b4f75c6"),
  "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."
}
```

- **1.4.2) Find all movies that have a synopsis and contains the word "Gandalf".**

○ Command :

```
db.movies.createIndex({ synopsis: "text" })
db.movies.find({ $text: { $search : "Gandalf" } }).pretty()
```

○ O/P :

```
{
  "_id" : ObjectId("6228bbabc111752e5b4f75c7"),
  "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."
}
```

- **1.4.3) Find all movies that have a synopsis and contains the word "Bilbo" and not the word "Gandalf".**

○ Command :

```
db.movies.createIndex({ synopsis: "text" })
db.movies.find({ $text: { $search : "Bilbo -Gandalf" } }).pretty()
```

○ O/P :

```
{
  "_id" : ObjectId("6228bc5da39598be9b6ad5b2"),
  "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("6228bb8dc111752e5b4f75c6"),
  "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."
}
```

- **1.4.4) Find all movies that have a synopsis and contains the word "dwarves" or "hobbit".**

○ Command :

```
db.movies.createIndex({ synopsis: "text" })
db.movies.find({ $text: { $search : "dwarves hobbit" } }).pretty()
```

○ O/P :

```
{
  "_id" : ObjectId("6228bb8dc111752e5b4f75c6"),
  "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("6228bbabc111752e5b4f75c7"),
  "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."
}
```


- **1.4.5) Find all movies that have a synopsis and contains the word "gold" and "dragon".**

- Command :

```
db.movies.createIndex({ synopsis: "text" })
db.movies.find({ $text: { $search : "gold" "dragon" } }).pretty()
```

- O/P :

```
{
  "_id" : ObjectId("6228bb8dc111752e5b4f75c6"),
  "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."
}
```

- **1.5.1) Delete the movie "Pee Wee Herman's Big Adventure".**

- Command :

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

- O/P :

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

- **1.5.2) Delete the movie "Aavtar".**

- Command :

```
db.movies.deleteOne({title: "Avatar"})
```

- O/P :

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