

## Assignment-02

01.Create database – Library

02.create collection – books

**Create Database** ×

**Database Name**

Library

**Collection Name**

books

☐ **Time-Series**  
Time-series collections efficiently store sequences of measurements over a period of time. [Learn More](#)

**> Additional preferences** (e.g. Custom collation, Clustered collections)

Cancel Create Database

03. Insert some sample documents into the 'books' collection.

Insert Data

```
[  
  {  
    "title": "Pride and Prejudice",  
    "author": "Jane Austen",
```

```
"year_published": 1813,
"genres": ["Fiction", "Romance"],
"available": true
},
{
  "title": "The Catcher in the Rye",
  "author": "J.D. Salinger",
  "year_published": 1951,
  "genres": ["Fiction", "Classic"],
  "available": true
},
{
  "title": "The Hobbit",
  "author": "J.R.R. Tolkien",
  "year_published": 1937,
  "genres": ["Fantasy", "Adventure"],
  "available": true
},
{
  "title": "Moby-Dick",
  "author": "Herman Melville",
  "year_published": 1851,
  "genres": ["Fiction", "Adventure"],
  "available": true
}
```

```
},  
{  
  "title": "War and Peace",  
  "author": "Leo Tolstoy",  
  "year_published": 1869,  
  "genres": ["Historical Fiction", "Classic"],  
  "available": true  
},  
{  
  "title": "The Odyssey",  
  "author": "Homer",  
  "year_published": -800,  
  "genres": ["Epic", "Adventure"],  
  "available": true  
},  
{  
  "title": "The Brothers Karamazov",  
  "author": "Fyodor Dostoevsky",  
  "year_published": 1880,  
  "genres": ["Fiction", "Philosophical"],  
  "available": true  
},  
{  
  "title": "Brave New World",
```

```
"author": "Aldous Huxley",
"year_published": 1932,
"genres": ["Dystopian", "Science Fiction"],
"available": true
},
{
  "title": "The Divine Comedy",
  "author": "Dante Alighieri",
  "year_published": 1320,
  "genres": ["Epic", "Poetry"],
  "available": true
},
{
  "title": "Crime and Punishment",
  "author": "Fyodor Dostoevsky",
  "year_published": 1866,
  "genres": ["Fiction", "Philosophical"],
  "available": true
}
]
```

## Insert Document



To collection Library.books

```
4  ▼  [
5  ▼  {
6      "title": "Pride and Prejudice",
7      "author": "Jane Austen",
8      "year_published": 1813,
9      "genres": ["Fiction", "Romance"],
10     "available": true
11  },
12  ▼  {
13     "title": "The Catcher in the Rye",
14     "author": "J.D. Salinger",
15     "year_published": 1951,
16     "genres": ["Fiction", "Classic"],
17     "available": true
18  },
19  ▼  {
20     "title": "The Hobbit",
21     "author": "J.R.R. Tolkien",
22     "year_published": 1937,
23     "genres": ["Fantasy", "Adventure"],
24     "available": true
25  },
26  ▼  }
```

Cancel

Insert

Documents 10 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#) ✚

Explain Reset Find </> Options ▶

+ ADD DATA ▾ EXPORT DATA ▾ UPDATE DELETE

25 ▾ 1 - 10 of 10 ↺ < > ▾ ≡ { } |

```
_id: ObjectId('68242ce09164dac61e2b1ff9')
title: "Pride and Prejudice"
author: "Jane Austen"
year_published: 1813
▶ genres: Array (2)
available: true
```

```
_id: ObjectId('68242ce09164dac61e2b1ffa')
title: "The Catcher in the Rye"
author: "J.D. Salinger"
year_published: 1951
▶ genres: Array (2)
available: true
```

```
_id: ObjectId('68242ce09164dac61e2b1ffb')
title: "The Hobbit"
author: "J.R.R. Tolkien"
year_published: 1937
▶ genres: Array (2)
available: true
```

04. Find all documents in the 'books' collection.

```
db.books.find()
```

>\_MONGOSH

> use Library

< switched to db Library

> db.books.find()

```
< {
  _id: ObjectId('68242ce09164dac61e2b1ff9'),
  title: 'Pride and Prejudice',
  author: 'Jane Austen',
  year_published: 1813,
  genres: [
    'Fiction',
    'Romance'
  ],
  available: true
}
{
  _id: ObjectId('68242ce09164dac61e2b1ffa'),
  title: 'The Catcher in the Rye',
  author: 'J.D. Salinger',
  year_published: 1951,
  genres: [
    'Fiction',
    'Classic'
  ],
  available: true
}
```

>\_MONGOSH

```
{
  _id: ObjectId('68242ce09164dac61e2b1ffb'),
  title: 'The Hobbit',
  author: 'J.R.R. Tolkien',
  year_published: 1937,
  genres: [
    'Fantasy',
    'Adventure'
  ],
  available: true
}
{
  _id: ObjectId('68242ce09164dac61e2b1ffc'),
  title: 'Moby-Dick',
  author: 'Herman Melville',
  year_published: 1851,
  genres: [
    'Fiction',
    'Adventure'
  ],
  available: true
}
{
  _id: ObjectId('68242ce09164dac61e2b1ffd'),
  title: 'War and Peace',
```

05. Find books published after 1950.

```
db.books.find({'year_published':{'$gt:1950}})
```



```
> db.books.find({'year_published':{'$gt:1950}})
< {
  _id: ObjectId('68242ce09164dac61e2b1ffa'),
  title: 'The Catcher in the Rye',
  author: 'J.D. Salinger',
  year_published: 1951,
  genres: [
    'Fiction',
    'Classic'
  ],
  available: true
}
Library>
```

## 06. Find a book by title

```
db.books.find({},{'title':1,'_id':0})
```

```

>_MONGOSH
createIndex('books','_id',{unique:true})
}
> db.books.find({},{'title':1,'_id':0})
< {
  title: 'Pride and Prejudice'
}
{
  title: 'The Catcher in the Rye'
}
{
  title: 'The Hobbit'
}
{
  title: 'Moby-Dick'
}
{
  title: 'War and Peace'
}
{
  title: 'The Odyssey'
}
{
  title: 'The Brothers Karamazov'
}

```

07. Update the year published for "The Great Gatsby".

```
db.books.updateOne({"title":"The Great Gatsby"},{$addToSet:{year_published:1948}})
```

```

> db.books.updateOne({"title":"The Great Gatsby"},{$addToSet:{published_year:1948}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}

```

08. Update the available status of "Moby-Dick" to false.

```
db.books.updateOne({"title":"Moby-Dick"},{$set:{available:false}});
```

```

> db.books.updateOne({"title":"Moby-Dick"},{$set:{"available":false}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Library >

```

09. Set a new field `checked_out` to false for all available books.

```

db.books.updateOne({},{$set:{"Checked_out":false}});
db.books.updateMany({},{$set:{"Checked_out":false}});
db.books.updateMany({"available":true},{$set:{"Checked_out":false}});

```

```

> db.books.updateOne({},{$set:{"Checked_out":false}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
> db.books.updateMany({},{$set:{"Checked_out":false}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 10,
  modifiedCount: 9,
  upsertedCount: 0
}
Library >

```

```
> db.books.updateMany({"available":true},{ $set: {"Checked_out":false}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 9,
  modifiedCount: 0,
  upsertedCount: 0
}
Library>
```

10. Change the checked\_out status to true for books in the "Adventure" genre.

```
db.books.updateOne({"genres":"Adventure"},{$set:{"Checked_out":true}});
```

```
> db.books.updateOne({"genres":"Adventure"},{$set:{"Checked_out":true}});
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Library>|
```

11. Delete a book by title

```
db.books.deleteOne({"title":"Moby-Dick"});
```

```
> db.books.deleteOne({"title":"Moby-Dick"});
< {
  acknowledged: true,
  deletedCount: 1
}
```

12. Delete all books published before 1930.

```
db.books.deleteMany({"year_published":{"$gte":1930}})
```

```
> db.books.deleteMany({"year_published":{$gte:1930}})
< {
  acknowledged: true,
  deletedCount: 3
}
Library> |
```