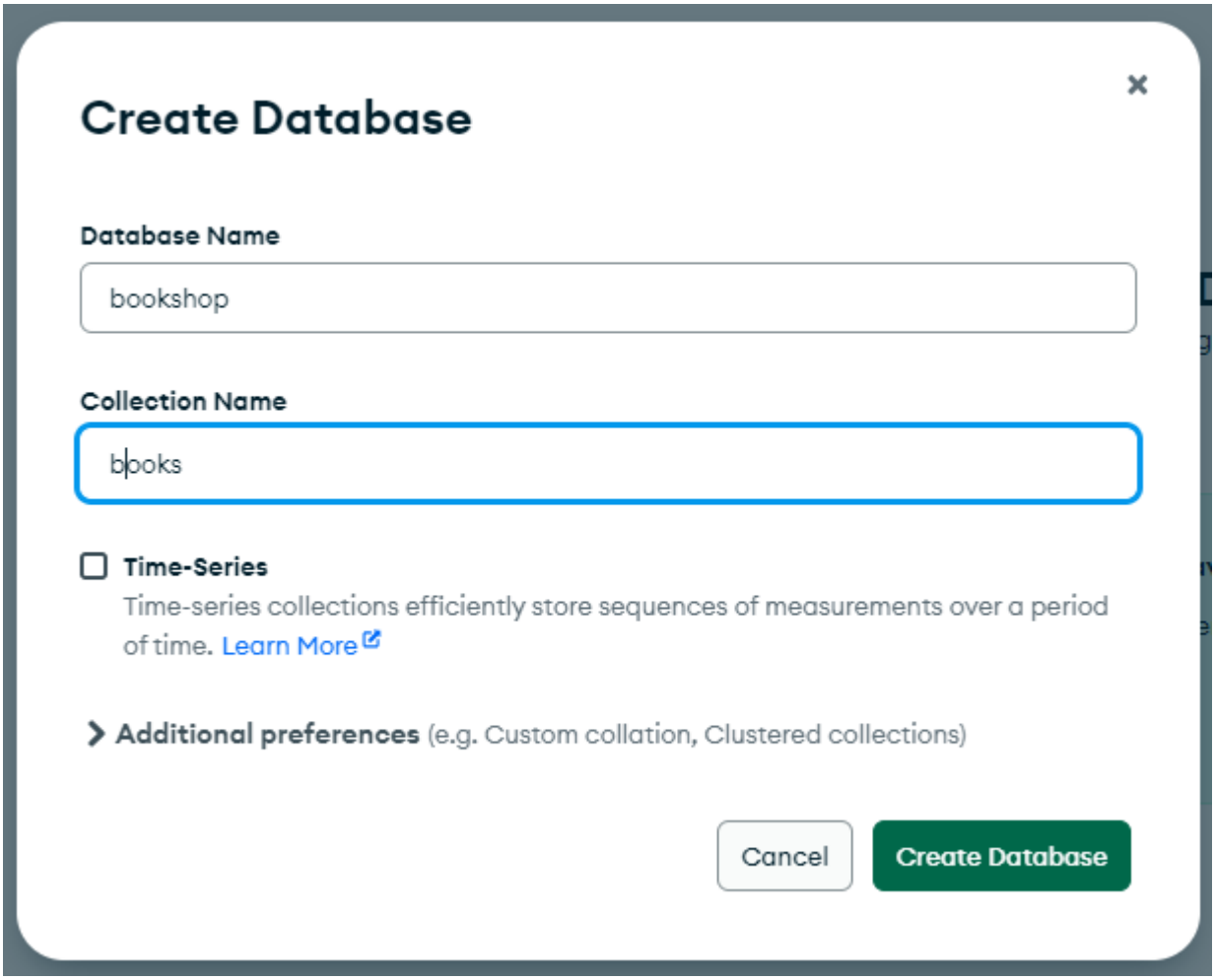
01.create a database bookshop

02.create a collection books



03.insert the following data

[{

"title": "The Hobbit",

"author": "J.R.R. Tolkien",

"published_year": 1937,

"genres": ["Fantasy", "Adventure"],

"pages": 310,

"available": true,

"rating": 4.8
},
{
"title": "1984",
"author": "George Orwell",
"published_year": 1949,
"genres": ["Dystopian", "PoliΘcal FicΘon"],
"pages": 328,
"available": true,
"rating": 4.7
},
{
"title": "To Kill a Mockingbird",
"author": "Harper Lee",
"published_year": 1960,
"genres": ["Southern Gothic", "Drama"],
"pages": 281,
"available": false,
"rating": 4.6
},
{
"title": "The Great Gatsby",
"author": "F. ScoΣ Fitzgerald",
"published_year": 1925,
"genres": ["Tragedy"],
"pages": 180,
"available": true,
"rating": 4.4
},

{

"title": "Brave New World",

"author": "Aldous Huxley",

"published_year": 1932,

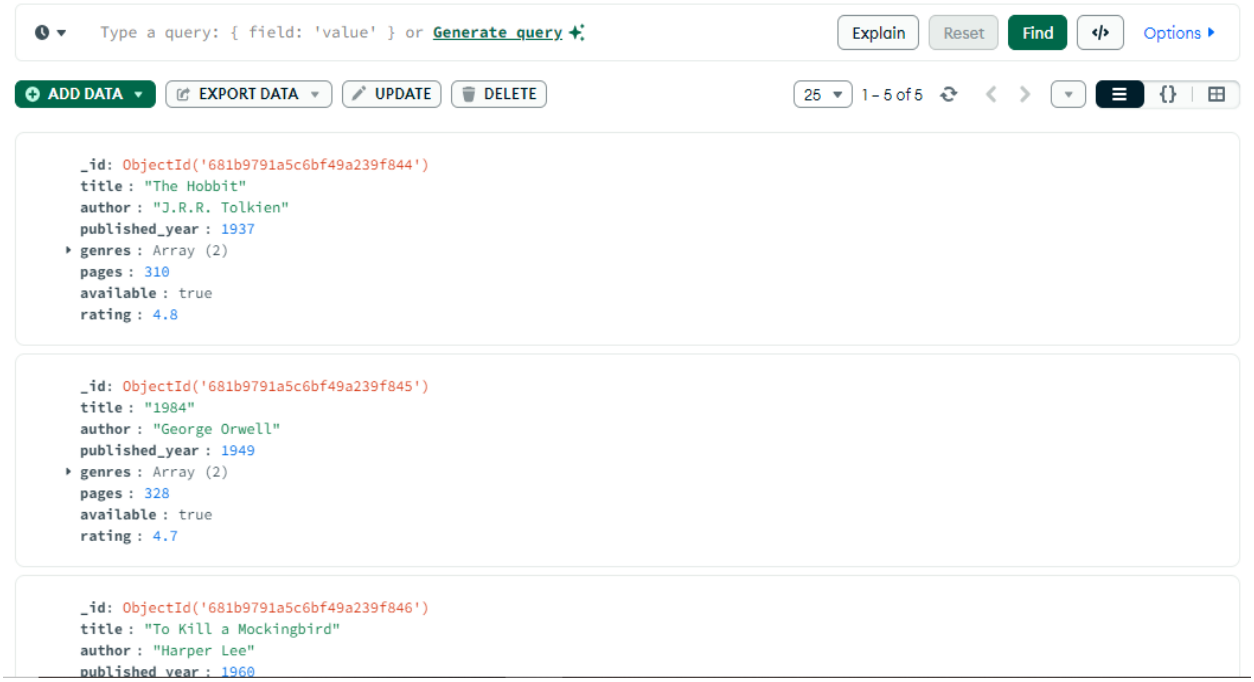
"genres": ["Science Fiction", "Dystopian"],

"pages": 311,

"available": true,

"rating": 4.2

}



04.Find all books

db.books.find()

```
>_MONGOSH
> use bookshop
< switched to db bookshop
> db.books.find()
< {
    _id: ObjectId('681b9791a5c6bf49a239f844'),
    title: 'The Hobbit',
    author: 'J.R.R. Tolkien',
    published_year: 1937,
    genres: [
      'Fantasy',
      'Adventure'
    ],
    pages: 310,
    available: true,
    rating: 4.8
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f845'),
    title: '1984',
    author: 'George Orwell',
    published_year: 1949,
    genres: [
      'Dystopian',
      'Poli0cal Fic0on'
    ],
```

```
>_MONGOSH
    pages: 328,
    available: true,
    rating: 4.7
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f846'),
    title: 'To Kill a Mockingbird',
    author: 'Harper Lee',
    published_year: 1960,
    genres: [
      'Southern Gothic',
      'Drama'
    ],
    pages: 281,
    available: false,
    rating: 4.6
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f847'),
    title: 'The Great Gatsby',
    author: 'F. ScoΣ Fitzgerald',
    published_year: 1925,
    genres: [
      'Tragedy'
    ],
```

```
    pages: 180,
    available: true,
    rating: 4.4
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f848'),
    title: 'Brave New World',
    author: 'Aldous Huxley',
    published_year: 1932,
    genres: [
      'Science Fic0on',
      'Dystopian'
    ],
    pages: 311,
    available: true,
    rating: 4.2
  }
bookshop>
```

05.Find all books published year 1950

db.books.find({published_year:{$gte:1950}})

```
> db.books.find({published_year:{$gte:1950}})
< {
    _id: ObjectId('681b9791a5c6bf49a239f846'),
    title: 'To Kill a Mockingbird',
    author: 'Harper Lee',
    published_year: 1960,
    genres: [
      'Southern Gothic',
      'Drama'
    ],
    pages: 281,
    available: false,
    rating: 4.6
  }
bookshop>
```

06.Find the available books

db.books.find({ "available": true });

```
>_MONGOSH
> db.books.find({ "available": true });
< {
    _id: ObjectId('681b9791a5c6bf49a239f844'),
    title: 'The Hobbit',
    author: 'J.R.R. Tolkien',
    published_year: 1937,
    genres: [
      'Fantasy',
      'Adventure'
    ],
    pages: 310,
    available: true,
    rating: 4.8
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f845'),
    title: '1984',
    author: 'George Orwell',
    published_year: 1949,
    genres: [
      'Dystopian',
      'Poli0cal Fic0on'
    ],
```

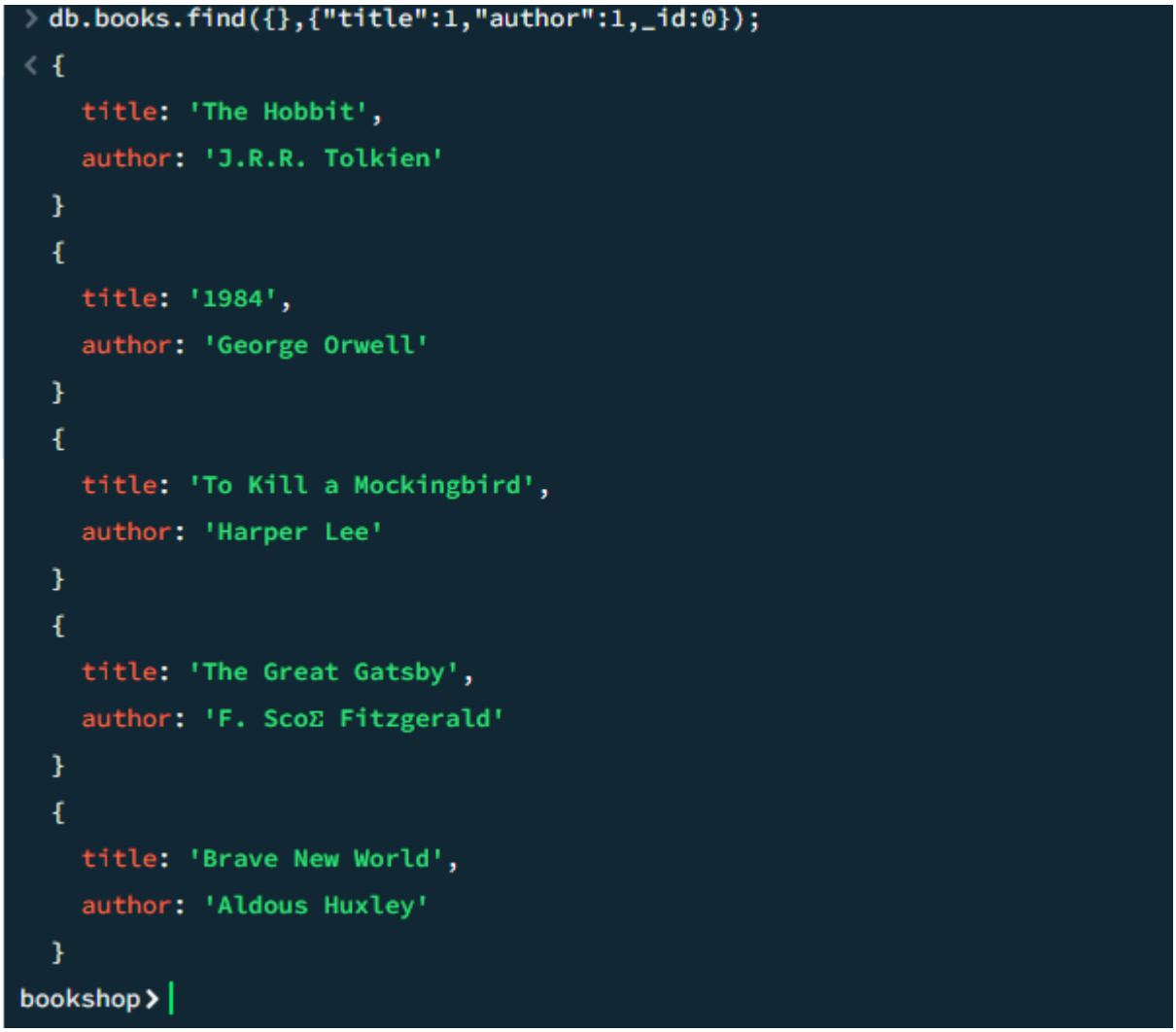
07.Find all books that belong to the "Dystopian" genre

db.books.find({ "genres": "Dystopian" });

```
>_MONGOSH
> db.books.find({"genres":"Dystopian"});
< {
    _id: ObjectId('681b9791a5c6bf49a239f845'),
    title: '1984',
    author: 'George Orwell',
    published_year: 1949,
    genres: [
      'Dystopian',
      'Poli0cal Fic0on'
    ],
    pages: 328,
    available: true,
    rating: 4.7
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f848'),
    title: 'Brave New World',
    author: 'Aldous Huxley',
    published_year: 1932,
    genres: [
      'Science Fic0on',
      'Dystopian'
    ],
    pages: 311,
    available: true,
```

08.Project only title and author fields:

db.books.find({}, { "title": 1, "author": 1, "_id": 0 });



09.Update the book "1984" to set available: false:

db.books.updateOne(

{ "title": "1984" },

{ $set: { "available": false } });

```
> db.books.updateOne({"title":"1984"},{$set:{"available":false}});
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
  }
```

10.Increase the rating of "Brave New World" by +0.1:

db.books.updateOne(

{ "title": "Brave New World" },

{ $inc: { "rating": 0.1 } });

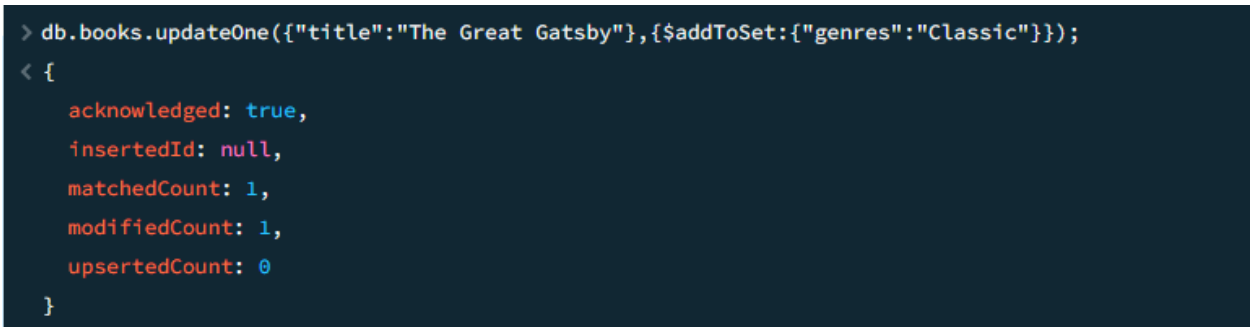
```
> db.books.updateOne({"titile":"Brave New World"},{$inc:{"rating":0.1}});
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 0,
    modifiedCount: 0,
    upsertedCount: 0
  }
```

11.Add a new genre "Classic" to "The Great Gatsby":

db.books.updateOne(

{ "title": "The Great Gatsby" },

{ $addToSet: { "genres": "Classic" } });



12.Sort books by published_year ascending:

db.books.find().sort({ "published_year": 1 });

```
>_MONGOSH

> db.books.find().sort({"published_year":1});
< {
    _id: ObjectId('681b9791a5c6bf49a239f847'),
    title: 'The Great Gatsby',
    author: 'F. ScoΣ Fitzgerald',
    published_year: 1925,
    genres: [
      'Tragedy',
      'Classic'
    ],
    pages: 180,
    available: true,
    rating: 4.4
  }
  {
    _id: ObjectId('681b9791a5c6bf49a239f848'),
    title: 'Brave New World',
    author: 'Aldous Huxley',
    published_year: 1932,
    genres: [
      'Science FicΘon',
      'Dystopian'
    ],
    pages: 311,
    available: true,
```