

Workshop 7: Group Practice Problem 1

Create a database for a library. They are stored in the library by authors.

Each author has a name, DOB, the books they wrote.

Each book should have a title, publish year, page count, and genre.

Workshop 7: Group Practice Problem 2

1. Write a MongoDB Shell command to find all science fiction books.
2. Write a MongoDB Shell command to find all books are romance and comedy genres.
3. Add a new book to one of the authors.

Do not write the answer in this booklet. Use scratch paper to write your answer.

Workshop 7: Group Practice Problem 1

Delete all documents from the collection below with price greater than 5.

```
foods = [ {name: "pizza", price: 5.00}, {name: "ice cream", price: 3.00},  
          {name: "pasta", price: 8.00}, {name: "salad", price: 10.00} ]
```

Workshop 7: Group Practice Problem 1

~~Designing~~ ~~Designing a MongoDB document database for a movie streaming service~~

~~Requirement~~

- ~~• Each movie has title, director, releaseYear~~
- ~~• Each movie~~

You are designing a MongoDB database for a podcast platform

Each podcast episode document has

title, host, releaseYear, topics

- A) write a MongoDB shell command to insert two podcast episode documents into a collection called episodes
- B) write a MongoDB command to find all episodes hosted by "Lex Fridman"

Do not write the answer in this booklet. Use scratch paper to write your answer.

Workshop 7: Group Practice Problem 1

albums = {

```
{
  title: "A1",
  artist: "Artist 1",
  release_year: 2025,
  songs: {
    song_title: "Song 1",
    duration: 300
  }
},
{
  title: "A2",
  artist: "Artist 2",
  release_year: 2026,
  songs: {
    song_title: "Song 2",
    duration: 400
  },
  {
    song_title: "Song 3",
    duration: 350
  }
}
}
```

Write the mongosh command
to delete Song2 from album A2.

Workshop 7: Group Practice Problem 1

create a JSON database schema for a movie collection. Each movie should contain information including title, release date, director, genre, and cast. Each cast member should also have their role identified.

Workshop 7: Group Practice Problem 2

write a Mongo DB shell command to query all movies that have the action genre.

then update a single movie document by setting the release date to today's date.

Workshop 7: Group Practice Problem 1

With the given database from practice problem 1, find all albums that are released after 2010 and has more than 3 songs in it.

Do not write the answer in this booklet. Use scratch paper to write your answer.

Workshop 7: Group Practice Problem 1

create a ~~db~~ database schema for a course planner

Imp notes:

- every semester has a season, year, and course list
 - course list has at least 3 courses
 - each course has a name, professor, and subject area
-

Person

Season

Year

Course List

Course

Subject Area

Professor

Student

Advisor

Prerequisite

Section

Enrollment

Grade

Do not write the answer in this booklet. Use scratch paper to write your answer.

Workshop 7: Group Practice Problem 2

Write a query to :

remove a course from the course list

find a semester with at least 2/4 courses

find semesters in year 2025

Workshop 7: Group Practice Problem 1

create a JSON data schema for TV shows. Your example schema should have at least two documents.

Important notes:

- Every TV show has a title, release year, and genre.
- Every TV show has one or more casts.
- Each cast has a name and an age.

Workshop 7: Group Practice Problem 2

write a MongoDB shell command to initialize a books collection in the library database.

Workshop 7: Group Practice Problem 1

Write a JSON database scheme for your classes this semester with class name, number of credits and profs name.

then use MongoDB shell command to find this class.

[] shell

Workshop 7: Group Practice Problem 1

In the collection `vgames`, find all games released after 2005 and with the genre RPG.

Do not write the answer in this booklet. Use scratch paper to write your answer.

Workshop 7: Group Practice Problem 2

```
use ("Metals")
```

```
db.create ("Noble-gases")
```

The above code is incorrect. Fix the errors.