### MongoDB Exercises

**CRUD Operations and Data Retrieval** 

#### **Movie Booking System Schema Creation**

#### CREATE THE FOLLOWING COLLECTIONS

#### **Key Collections:**

- 1. Movies Collection: Information on available movies.
- 2. Theaters Collection: Details of theater locations.
- 3. **Users Collection:** Customer data and loyalty points.
- 4. Bookings Collection: Reservation information.

# **Movies Collection Document Structure**

```
"movie_id": "UUID",

"title": "String",

"genre": "String",

"release_year": "Number",

"duration": "Number",

"ratings": "Number",

"actors": ["Array of Actor Names"]
```

## Theater Collection **Document Structure**

```
{
  "theater_id": "UUID",
  "name": "String",
  "city": "String",
      "state": "String",
      "country": "String"
},
  "seating_capacity": "Number"
}
```

### **Users Collection Document Structure**

## **Bookings Collection Document Structure**

```
{
  "user_id": "UUID",
  "name": "String",
  "email": "String",
  "date_of_birth": "Date",
  "loyalty_points": "Number"
}
```

```
"booking_id": "UUID",
"user_id": "UUID", // Reference to Users collection
"movie_id": "UUID", // Ref to Movies collection
"theater_id": "UUID", // Ref to Theaters collection
"seats_booked": "Number", // No of seats booked
"total_price": "Number",
"booking_date": "Date",
}
```

#### Questions

- Q1. Insert a new movie into the Movies collection.
- Q2. Insert multiple users into the Users collection.
- Q3. Find all movies in the 'Action' genre.
- Q4. Find all theaters in the city 'New York'.
- Q5. Update the seating capacity of a theater with ID '1'.

### Questions

- Q6. Delete a movie by its title.
- Q7. Retrieve all bookings made by the user with ID '2'.
- Q8. Find a movie by its title and display only the title and genre fields.
- Q9. Find users who have more than 100 loyalty points.
- Q10. Insert a new booking into the Bookings collection.