Labsheet 10
PMDS506P Database Management systems.

MongoDB basics, operators and methods.

Create a database for a Movie Review System and Insert the given Documents

```
{
  "title": "The Great Escape",
  "director": "John Sturges",
  "duration": 172,
  "genres": ["action", "adventure", "war"],
  "rating": 9,
  "release_year": 1963,
  "production": { "studio": "United Artists", "country": "USA" },
  "reviews": [
    { "reviewer": "Alice", "score": 8, "comment": "Thrilling and intense." },
    { "reviewer": "Bob", "score": 9, "comment": "A masterpiece of its time." }
  ]
}

{
  "title": "Inception",
  "director": "Christopher Nolan",
  "duration": 148,
  "genres": ["sci-fi", "thriller"],
  "rating": 8.5,
  "release_year": 2010,
  "production": { "studio": "Warner Bros.", "country": "USA" },
  "reviews": [
    { "reviewer": "Chris", "score": 10, "comment": "Mind-bending and brilliant." },
    { "reviewer": "Diane", "score": 7, "comment": "Too complex at times." }
  ]
}

{
  "title": "Parasite",
  "director": "Bong Joon Ho",
  "duration": 132,
  "genres": ["drama", "thriller"],
  "rating": 9.5,
  "release_year": 2019,
  "production": { "studio": "CJ Entertainment", "country": "South Korea" },
  "reviews": [
    { "reviewer": "Elena", "score": 10, "comment": "Perfectly crafted social commentary." },
    { "reviewer": "Frank", "score": 9, "comment": "Suspenseful and thought-provoking." }
  ]
```

```json
  }

  {
    "title": "The Godfather",
    "director": "Francis Ford Coppola",
    "duration": 175,
    "genres": ["crime", "drama"],
    "rating": 9.7,
    "release_year": 1972,
    "production": { "studio": "Paramount Pictures", "country": "USA" },
    "reviews": [
      { "reviewer": "George", "score": 10, "comment": "A timeless classic." },
      { "reviewer": "Hannah", "score": 9.5, "comment": "Masterfully directed." }
    ]
  }

  {
    "title": "Spirited Away",
    "director": "Hayao Miyazaki",
    "duration": 125,
    "genres": ["animation", "fantasy"],
    "rating": 9.1,
    "release_year": 2001,
    "production": { "studio": "Studio Ghibli", "country": "Japan" },
    "reviews": [
      { "reviewer": "Ivan", "score": 10, "comment": "Beautiful and imaginative." },
      { "reviewer": "Julia", "score": 8, "comment": "A magical journey." }
    ]
  }

  {
    "title": "The Dark Knight",
    "director": "Christopher Nolan",
    "duration": 152,
    "genres": ["action", "crime", "drama"],
    "rating": 9.0,
    "release_year": 2008,
    "production": { "studio": "Warner Bros.", "country": "USA" },
    "reviews": [
      { "reviewer": "Kyle", "score": 9.5, "comment": "Heath Ledger's Joker steals the show." },
      { "reviewer": "Laura", "score": 8, "comment": "Gripping and dark." }
    ]
  }

  {
    "title": "La La Land",
    "director": "Damien Chazelle",
```

```
  "duration": 128,
  "genres": ["musical", "drama"],
  "rating": 8.2,
  "release_year": 2016,
  "production": { "studio": "Summit Entertainment", "country": "USA" },
  "reviews": [
    { "reviewer": "Megan", "score": 8.5, "comment": "A modern musical done right." },
    { "reviewer": "Nick", "score": 7, "comment": "Beautiful, but not for everyone." }
  ]
}


{
  "title": "The Matrix",
  "director": "The Wachowskis",
  "duration": 136,
  "genres": ["sci-fi", "action"],
  "rating": 8.7,
  "release_year": 1999,
  "production": { "studio": "Warner Bros.", "country": "USA" },
  "reviews": [
    { "reviewer": "Olivia", "score": 9, "comment": "Groundbreaking special effects." },
    { "reviewer": "Paul", "score": 8, "comment": "Philosophical and action-packed." }
  ]
}


{
  "title": "The Lord of the Rings: The Fellowship of the Ring",
  "director": "Peter Jackson",
  "duration": 178,
  "genres": ["fantasy", "adventure"],
  "rating": 9.0,
  "release_year": 2001,
  "production": { "studio": "New Line Cinema", "country": "USA" },
  "reviews": [
    { "reviewer": "Quincy", "score": 9, "comment": "An epic journey beautifully filmed." },
    { "reviewer": "Rachel", "score": 8.5, "comment": "A fantastic adaptation of the book." }
  ]
}


{
  "title": "Interstellar",
  "director": "Christopher Nolan",
  "duration": 169,
  "genres": ["sci-fi", "adventure"],
  "rating": 8.6,
  "release_year": 2014,
  "production": { "studio": "Paramount Pictures", "country": "USA" },
  "reviews": [
```

    { "reviewer": "Sam", "score": 9, "comment": "Visually stunning and thought-provoking." },
    { "reviewer": "Tina", "score": 8, "comment": "Complex but rewarding." }
  ]

1. Find all movies directed by Christopher Nolan.
2. Find movies with a rating greater than 9.
3. Find all movies in the "sci-fi" genre.
4. Find movies released before the year 2000.
5. Find movies that have a duration of more than 150 minutes.
6. Find movies where the review score is greater than 9.
7. Find movies that have received a review from "Alice".
8. Find movies with a rating between 8 and 9 (inclusive).
9. Find movies that belong to both the "drama" and "crime" genres.
10. Find movies where at least one review's score is less than 8.
11. Find only the title and director of all movies.
12. Show only the title and rating, excluding the _id field.
13. Find all movies and display the studio and country from the production field.
14. Find movies directed by "Bong Joon Ho" and display only the title and release year.
15. Find the top 3 highest-rated movies.
16. Sort all movies by release year in descending order.
17. Sort all movies by duration in ascending order and limit the results to 5.
18. Find movies in the "action" genre and sort them by rating in descending order.
19. Find all movies that have a review by "Chris".
20. Find all movies where the review score is 10.