

Full Stack Web Development

Exercise

Work in a small group to design a database for library that could handle an activity:

- 1. How to become a member
- 2. Keep books information
- 3. Track member activity (borrow books, staff in charge)
- 4. Track member transaction (total, fine, member could borrow books more than one in single transaction)
- 5. Staff information
- 6. Staff schedule
- 7. Library branch (location)

- 1. Work in a small group to analyze and design a database for social media such as linkedin. Define what kind of tables do you need based on linkedin activity.
- 2. Work in a small group to analyze and design a database for ecommerce such as tokopedia. Define what kind of tables do you need based on that apps activity.



Go to https://dev.mysql.com/doc/index-other.html and download world db. Extract and import world data into your MySQL.

- 1. Find country name with most population from table country
- 2. Find the second one country with most population from table country
- 3. Find country name with lowest population from table country
- 4. Find the third one country with lowest population from table country
- 5. Find the largest continent by sum surface area with life expectancy more than 75



Go to https://dev.mysql.com/doc/index-other.html and download sakila db. Extract and import sakila data into your MySQL.

- 1. Show all data using IN, and display the country_id and country columns of the following countries: China, Bangladesh, and India
- 2. Find every actors whose last names contain the letters OD. Order the rows by last name and first name, in that order
- 3. Modify table actors. Add a middle_name column to the table actor. Position it between first_name and last_name. Hint: you will need to specify the data type.
- List every last names of actors and the number of actors who have that last name, but only for names that are shared by at least two actors
- 5. Join the table and display the first and last names, as well as the address, of each staff member.

- 6. Find out how many copies of the film "Hunchback Impossible" exist in the inventory system
- 7. Find and display the most frequently rented movies in descending order.
- 8. Write down a query in order to display each store its store ID, city, and country
- 9. Use subqueries to display every actors who appear in the film Alone Trip.
- 10. Delete the middle_name column from table actors



Thank You!

