**1. SELECT statements**

1a. Select all columns from the actor table.

1b. Select only the last\_name column from the actor table.

1c. Select only the following columns from the film table.

COLUMN NAME Note

title Exists in film table.

description Exists in film table.

rental\_duration Exists in film table.

rental\_rate Exists in film table.

total\_rental\_cost rental\_duration \* rental\_rate

**2. DISTINCT operator**

2a. Select all distinct (different) last names from the actor table.

2b. Select all distinct (different) postal codes from the address table.

2c. Select all distinct (different) ratings from the film table.

**3. WHERE clause**

3a. Select the title, description, rating, movie length columns from the films table that last 3 hours or longer.

3b. Select the payment id, amount, and payment date columns from the payments table for payments made on or after 05/27/2005.

3c. Select the primary key, amount, and payment date columns from the payment table for payments made on 05/27/2005.

3d. Select all columns from the customer table for rows that have a last names beginning with S and a first names ending with N.

3e. Select all columns from the customer table for rows where the customer is inactive or has a last name beginning with "M".

3f. Select all columns from the category table for rows where the primary key is greater than 4 and the name field begins with either C, S or T.

3g. Select all columns minus the password column from the staff table for rows that contain a password.

3h. Select all columns minus the password column from the staff table for rows that do not contain a password.

**4. IN operator**

4a. Select the phone and district columns from the address table for addresses in California, England, Taipei, or West Java.

4b. Select the payment id, amount, and payment date columns from the payment table for payments made on 05/25/2005, 05/27/2005, and 05/29/2005.

(Use the IN operator and the DATE function, instead of the AND operator as in previous exercises.)

4c. Select all columns from the film table for films rated G, PG-13 or NC-17.

**5. BETWEEN operator**

5a. Select all columns from the payment table for payments made between midnight 05/25/2005 and 1 second before midnight 05/26/2005.

5b. Select the following columns from the film table for films where the length of the description is between 100 and 120.

COLUMN NAME Note

title Exists in film table.

description Exists in film table.

release\_year Exists in film table.

total\_rental\_cost rental\_duration \* rental\_rate

**6. LIKE operator**

6a. Select the following columns from the film table for rows where the description begins with "A Thoughtful".

Title, Description, Release Year

6b. Select the following columns from the film table for rows where the description ends with the word "Boat".

Title, Description, Rental Duration

6c. Select the following columns from the film table where the description contains the word "Database" and the length of the film is greater than 3 hours.

Title, Length, Description, Rental Rate

**7. LIMIT Operator**

7a. Select all columns from the payment table and only include the first 20 rows.

7b. Select the payment date and amount columns from the payment table for rows where the payment amount is greater than 5, and only select rows whose zero-based index in the result set is between 1000-2000.

7c. Select all columns from the customer table, limiting results to those where the zero-based index is between 101-200.

**8. ORDER BY statement**

8a. Select all columns from the film table and order rows by the length field in ascending order.

8b. Select all distinct ratings from the film table ordered by rating in descending order.

8c. Select the payment date and amount columns from the payment table for the first 20 payments ordered by payment amount in descending order.

8d. Select the title, description, special features, length, and rental duration columns from the film table for the first 10 films with behind the scenes footage under 2 hours in length and a rental duration between 5 and 7 days, ordered by length in descending order.

**9. JOINS**

9a. Select customer first\_name/last\_name and actor first\_name/last\_name columns from performing a /left join/ between the customer and actor column on the last\_name column in each table.

(i.e. `customer.last\_name = actor.last\_name`)

Label customer first\_name/last\_name columns as customer\_first\_name/customer\_last\_name

Label actor first\_name/last\_name columns in a similar fashion.

( returns correct number of records: 599)

9b. Select the customer first\_name/last\_name and actor first\_name/last\_name columns from performing a /right join between the customer and actor column on the last\_name column in each table. (i.e. `customer.last\_name = actor.last\_name`)

9c. Select the customer first\_name/last\_name and actor first\_name/last\_name columns from performing an inner join between the customer and actor column on the last\_name column in each table. (i.e. `customer.last\_name = actor.last\_name`)

(returns correct number of records: 43)

9d. Select the city name and country name columns from the city table, performing a left join with the country table to get the country name column.

(Returns correct records: 600)

9e. Select the title, description, release year, and language name columns from the film table, performing a left join with the language table to get the "language" column.

Label the language.name column as "language" (e.g. `select language.name as language`)

(returns 1000 rows: correct)

9f. Select the first\_name, last\_name, address, address2, city name, district, and postal code columns from the staff table, performing 2 left joins with the address table then the city table to get the address and city related columns.

(returns correct number of rows: 2)