USE sakila;

#1a.

SELECT first\_name, last\_name FROM actor;

#1b.

SELECT CONCAT(UPPER(first\_name), ' ', UPPER(last\_name)) AS 'Actor Name' FROM actor;

#2a.

SELECT actor\_id, first\_name, last\_name FROM actor WHERE first\_name = 'JOE';

#2b.

SELECT actor\_id, first\_name, last\_name FROM actor WHERE last\_name LIKE '%GEN%';

#2c.

SELECT actor\_id, first\_name, last\_name FROM actor WHERE last\_name LIKE '%LI%' ORDER BY last\_name, first\_name;

#2d.

SELECT country\_id, country FROM country WHERE country IN ('Afghanistan', 'Bangladesh', 'China');

#3a.

ALTER TABLE actor ADD COLUMN middle\_name VARCHAR(45) AFTER first\_name;

#3b.

ALTER TABLE actor MODIFY COLUMN middle\_name BLOB;

#3c.

ALTER TABLE actor DROP COLUMN middle\_name;

#4a.

SELECT last\_name, (SELECT count(last\_name) FROM actor WHERE a.last\_name = actor.last\_name) AS 'last\_name\_count' FROM actor AS a GROUP BY a.last\_name;

#4b.

SELECT last\_name, last\_name\_count FROM (SELECT last\_name, (SELECT count(last\_name) FROM actor WHERE a.last\_name = actor.last\_name) AS 'last\_name\_count' FROM actor AS a GROUP BY a.last\_name) AS b WHERE b.last\_name\_count > 1;

#4c.

UPDATE actor SET first\_name = 'HARPO' WHERE first\_name = 'GROUCHO' AND last\_name = 'WILLIAMS';

#4d.

UPDATE actor SET first\_name = CASE WHEN first\_name = 'HARPO' THEN 'GROUCHO' ELSE 'MUCHO GROUCHO' END WHERE actor\_id = 172;

#5a.

SHOW CREATE TABLE address;

#6a.

SELECT first\_name, last\_name, address, city, district, postal\_code FROM staff JOIN address ON staff.address\_id = address.address\_id JOIN city ON address.city\_id = city.city\_id;

#6b.

SELECT first\_name, last\_name, total\_amount FROM staff JOIN (SELECT staff\_id, SUM(amount) AS 'total\_amount' FROM payment WHERE payment\_date BETWEEN '2005-08-01 00:00:00' AND '2005-08-31 00:00:00' GROUP BY staff\_id) AS payments on staff.staff\_id = payments.staff\_id;

#6c.

SELECT title, number\_of\_actors FROM film INNER JOIN (SELECT film\_id, COUNT(actor\_id) AS 'number\_of\_actors' FROM film\_actor GROUP BY film\_id) AS actor\_count ON film.film\_id = actor\_count.film\_id;

#6d.

SELECT title, copies\_in\_inventory FROM film JOIN (SELECT film\_id, COUNT(inventory\_id) AS 'copies\_in\_inventory' FROM inventory GROUP BY film\_id) AS inventory\_count ON film.film\_id = inventory\_count.film\_id WHERE title = 'HUNCHBACK IMPOSSIBLE';

#6e.

SELECT first\_name, last\_name, total\_paid FROM customer JOIN (SELECT customer\_id, SUM(amount) AS 'total\_paid' FROM payment GROUP BY customer\_id) AS total\_payments ON customer.customer\_id = total\_payments.customer\_id ORDER BY last\_name;

#7a.

SELECT title FROM film WHERE language\_id IN (SELECT language\_id FROM language WHERE name = 'English') AND title IN (SELECT title FROM film WHERE title LIKE 'K%' OR title LIKE 'Q%');

#7b.

SELECT first\_name, last\_name FROM actor WHERE actor\_id IN (SELECT actor\_id FROM film\_actor WHERE film\_id IN (SELECT film\_id FROM film WHERE title = 'ALONE TRIP'));

#7c.

SELECT name, email FROM customer\_list JOIN customer ON customer\_list.ID = customer.customer\_id WHERE country = 'Canada';

#7d.

SELECT title, description, release\_year, rental\_duration, rental\_rate, length, replacement\_cost, rating, special\_features FROM film WHERE film\_id IN (SELECT film\_id FROM film\_category WHERE category\_id IN (SELECT category\_id FROM category WHERE name ='Family'));

#7e.

SELECT title, film\_rental\_count FROM film JOIN (SELECT film\_id, SUM(inventory\_rental\_count) AS film\_rental\_count FROM inventory JOIN (SELECT inventory\_id, COUNT(rental\_id) AS inventory\_rental\_count FROM rental GROUP BY inventory\_id) AS rental\_count ON inventory.inventory\_id = rental\_count.inventory\_id GROUP BY film\_id) AS rent\_count ON film.film\_id = rent\_count.film\_id ORDER BY film\_rental\_count DESC;

#7f.

SELECT store\_id, staff\_total\_amount AS store\_total\_amount FROM store JOIN (SELECT staff\_id, SUM(amount) AS staff\_total\_amount FROM payment GROUP BY staff\_id) AS staff\_amount ON store.manager\_staff\_id = staff\_amount.staff\_id;

#7g.

SELECT store\_id, city, country FROM store JOIN address ON store.address\_id = address.address\_id JOIN city ON address.city\_id = city.city\_id JOIN country ON city.country\_id = country.country\_id;

#7h.

SELECT name, SUM(amount) AS gross\_revenue FROM category JOIN film\_category ON category.category\_id = film\_category.category\_id JOIN inventory ON film\_category.film\_id = inventory.film\_id JOIN rental ON inventory.inventory\_id = rental.inventory\_id JOIN payment ON rental.rental\_id = payment.rental\_id GROUP BY name ORDER BY SUM(amount) DESC LIMIT 5;

#8a.

CREATE VIEW top\_five\_genres AS (SELECT name, SUM(amount) AS gross\_revenue FROM category JOIN film\_category ON category.category\_id = film\_category.category\_id JOIN inventory ON film\_category.film\_id = inventory.film\_id JOIN rental ON inventory.inventory\_id = rental.inventory\_id JOIN payment ON rental.rental\_id = payment.rental\_id GROUP BY name ORDER BY SUM(amount) DESC LIMIT 5);

#8b.

SELECT \* FROM top\_five\_genres;

#8c.

DROP VIEW top\_five\_genres;