Here are **50 MySQL questions** based on the **Sakila database** that are tailored for data analysts. These questions cover a range of SQL concepts including SELECT queries, JOINs, GROUP BY, aggregate functions, subqueries, and more.

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1. Basic Queries

1. List all customers along with their email addresses.
2. Retrieve all films with a rental rate greater than 4.
3. Display the first and last names of all actors.
4. Retrieve all films released in 2006.
5. Show all categories in the category table.

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2. Filtering and Sorting

6. Find all customers whose first name starts with 'J'.
7. Retrieve all films where the title contains the word "ACTION."
8. List all films with a length between 90 and 120 minutes.
9. Sort the list of stores by their IDs in descending order.
10. Show the top 10 longest films in the database.

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3. Aggregate Functions

11. Count the total number of films in the database.
12. Find the average rental rate of all films.
13. Get the minimum and maximum film lengths.
14. Count the total number of customers in each store.
15. Calculate the total revenue generated by the rental transactions.

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4. GROUP BY

16. Group films by their rating and count how many films belong to each rating.
17. Find the total length of films in each category.
18. List the number of films available for each replacement cost.
19. Find the average rental rate for each film category.
20. Count the number of actors in each last name group.

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5. JOIN Queries

21. List all films along with their corresponding categories.
22. Show the names of all customers along with their rented films.
23. Retrieve the names of all staff members and their respective stores.
24. List all films along with their actors.
25. Display the category name and the number of films in each category.

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6. Subqueries

26. Find the film with the highest rental rate using a subquery.
27. List all customers who have rented more than 5 films.
28. Retrieve the titles of films that have been rented more than 50 times.
29. Find the stores with the most customers using a subquery.
30. Get the names of customers who have never rented a film.

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7. Date and Time Functions

31. List all rental transactions that occurred in the last 30 days.
32. Find the most recent rental transaction in the database.
33. Show the total number of rentals for each month in 2005.
34. Calculate the total number of days each film has been rented.
35. Retrieve all customers who registered after January 1, 2006.

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8. Advanced JOIN Queries

36. Retrieve the film titles along with the names of customers who rented them and the rental dates.
37. Find all stores with their respective revenue generated from rentals.
38. List all staff members and the films they have rented out.
39. Retrieve the total revenue for each film category.
40. List the most rented film in each store.

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9. Data Insights

41. Find the customer who has rented the most films.

42. Identify the most popular film category based on the number of rentals.
43. Determine the least rented film and its category.
44. List the total revenue generated by each store.
45. Find the top 5 highest-grossing films.

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10. Updates and Modifications

46. Update the rental rate of all films with a length greater than 120 minutes to 5.99.
47. Set all customers from a specific city (e.g., 'Tokyo') to inactive.
48. Increase the replacement cost of all films in the "Action" category by 10%.
49. Remove all customers who have never rented a film.
50. Add a new category named "Documentary" to the category table.

1. INNER JOIN

1. **Find the names of all customers who rented the film "Jaws".**
2. **List all films directed by a specific director (e.g., 'Woody Allen').**
3. **Retrieve the names of all actors who have appeared in the film "Academy Dinosaur".**
4. **Find the names of all customers who rented films in the "Horror" genre.**
5. **List all films that were rented by the customer with customer_id = 1.**

2. LEFT JOIN

1. **Find all customers, including those who have never rented a film.**
2. **List all films, including those that have never been rented.**
3. **Find all actors, including those who have not appeared in any film.**
4. **List all categories, including those that have no associated films.**
5. **Find all inventory items, including those that have never been rented.**

3. RIGHT JOIN

1. **List all films, along with the names of the actors who have appeared in them (include films with no actors).**
2. **Find all inventory items, along with the corresponding rental information (include inventory items that have not been rented).**
3. **List all categories, along with the films that belong to each category (include categories with no associated films).**

4. **Find all actors, along with the films in which they have appeared (include actors who have not appeared in any film).**
5. **List all rentals, along with the corresponding customer information (include rentals where customer information might be missing).**

4. FULL OUTER JOIN (Note: MySQL doesn't have a direct FULL OUTER JOIN equivalent. You can simulate it using a combination of LEFT JOIN and RIGHT JOIN.)

1. **Find all customers and their rental history, including customers with no rentals and rentals without associated customer information.**
2. **List all films and their inventory records, including films with no inventory and inventory items without associated films.**
3. **Retrieve all actors and their film appearances, including actors with no films and films with no associated actors.**
4. **List all categories and their associated films, including categories with no films and films without associated categories.**
5. **Find all rentals and their corresponding payment information, including rentals without payments and payments without associated rentals.**

5. Other Joins (using subqueries, etc.)

1. **Find all customers who have rented at least one film in the "Comedy" genre.**
2. **List all films that have been rented by more than one customer.**
3. **Find all actors who have appeared in at least two different films.**
4. **Determine the top 3 most rented films in each category.**
5. **List all customers who have rented films directed by a specific director.**