SQL Sakila Dataset

LANGUAGE

LANGUAGE_ID	NUMBER(22) PK
NAME	CHAR(20)
LAST_UPDATE	TIMESTAMP

STAFF

STAFF_ID	NUMBER(22) PK
FIRST_NAME	VARCHAR2(45)
LAST_NAME	VARCHAR2(45)
ADDRESS_ID	NUMBER(22) FK
PICTURE	BLOB N
EMAIL	VARCHAR2(50) N
STORE_ID	NUMBER(22) FK
ACTIVE	NUMBER(22)
USERNAME	VARCHAR2(16)
PASSWORD	VARCHAR2(40) N
LAST_UPDATE	TIMESTAMP

PAYMENT

PAYMENT_ID	NUMBER(22) PK
CUSTOMER_ID	NUMBER(22) FK
STAFF_ID	NUMBER(22) FK
RENTAL_ID	NUMBER(22) N FK
AMOUNT	NUMBER(5,2)
PAYMENT_DATE	TIMESTAMP
LAST_UPDATE	TIMESTAMP

INVENTORY

INVENTORY_ID	NUMBER(22) PK
FILM_ID	NUMBER(22) FK
STORE_ID	NUMBER(22) FK
LAST_UPDATE	TIMESTAMP

RENTAL

RENTAL_ID	NUMBER(22) PK
RENTAL_DATE	TIMESTAMP
INVENTORY_ID	NUMBER(22) FK
CUSTOMER_ID	NUMBER(22) FK
RETURN_DATE	TIMESTAMP N
STAFF_ID	NUMBER(22) FK
LAST_UPDATE	TIMESTAMP

ACTOR

ACTOR_ID	NUMBER(22) PK
FIRST_NAME	VARCHAR2(45)
LAST_NAME	VARCHAR2(45)
LAST_UPDATE	TIMESTAMP

FILM

FILM_ID	NUMBER(22) PK
TITLE	VARCHAR2(255)
DESCRIPTION	CLOB N
RELEASE_YEAR	VARCHAR2(4) N
LANGUAGE_ID	NUMBER(22) FK
ORIGINAL_LANGUAGE_ID	NUMBER(22) N FK
RENTAL_DURATION	NUMBER(22)
RENTAL_RATE	NUMBER(4,2)
LENGTH	NUMBER(22) N
REPLACEMENT_COST	NUMBER(5,2)
RATING	VARCHAR2(10) N
SPECIAL_FEATURES	VARCHAR2(100) N
LAST_UPDATE	TIMESTAMP

STORE

STORE_ID	NUMBER(22) PK
MANAGER_STAFF_ID	NUMBER(22) FK
ADDRESS_ID	NUMBER(22) FK
LAST_UPDATE	TIMESTAMP

CUSTOMER

CUSTOMER_ID	NUMBER(22) PK
STORE_ID	NUMBER(22) FK
FIRST_NAME	VARCHAR2(45)
LAST_NAME	VARCHAR2(45)
EMAIL	VARCHAR2(50) N
ADDRESS_ID	NUMBER(22) FK
ACTIVE	CHAR(1)
CREATE_DATE	DATE
LAST_UPDATE	TIMESTAMP

FILM_ACTOR

ACTOR_ID	NUMBER(22) PK FK
FILM_ID	NUMBER(22) PK FK
LAST_UPDATE	TIMESTAMP

ADDRESS

ADDRESS_ID	NUMBER(22) PK
ADDRESS	VARCHAR2(50)
ADDRESS2	VARCHAR2(50) N
DISTRICT	VARCHAR2(20)
CITY_ID	NUMBER(22) FK
POSTAL_CODE	VARCHAR2(10) N
PHONE	VARCHAR2(20)
LAST_UPDATE	TIMESTAMP

CITY

CITY_ID	NUMBER(22) PK
CITY	VARCHAR2(50)
COUNTRY_ID	NUMBER(22) FK
LAST_UPDATE	TIMESTAMP

CATEGORY

CATEGORY_ID	NUMBER(22) PK
NAME	VARCHAR2(25)
LAST_UPDATE	TIMESTAMP

FILM_CATEGORY

FILM_ID	NUMBER(22) PK FK
CATEGORY_ID	NUMBER(22) PK FK
LAST_UPDATE	TIMESTAMP

COUNTRY

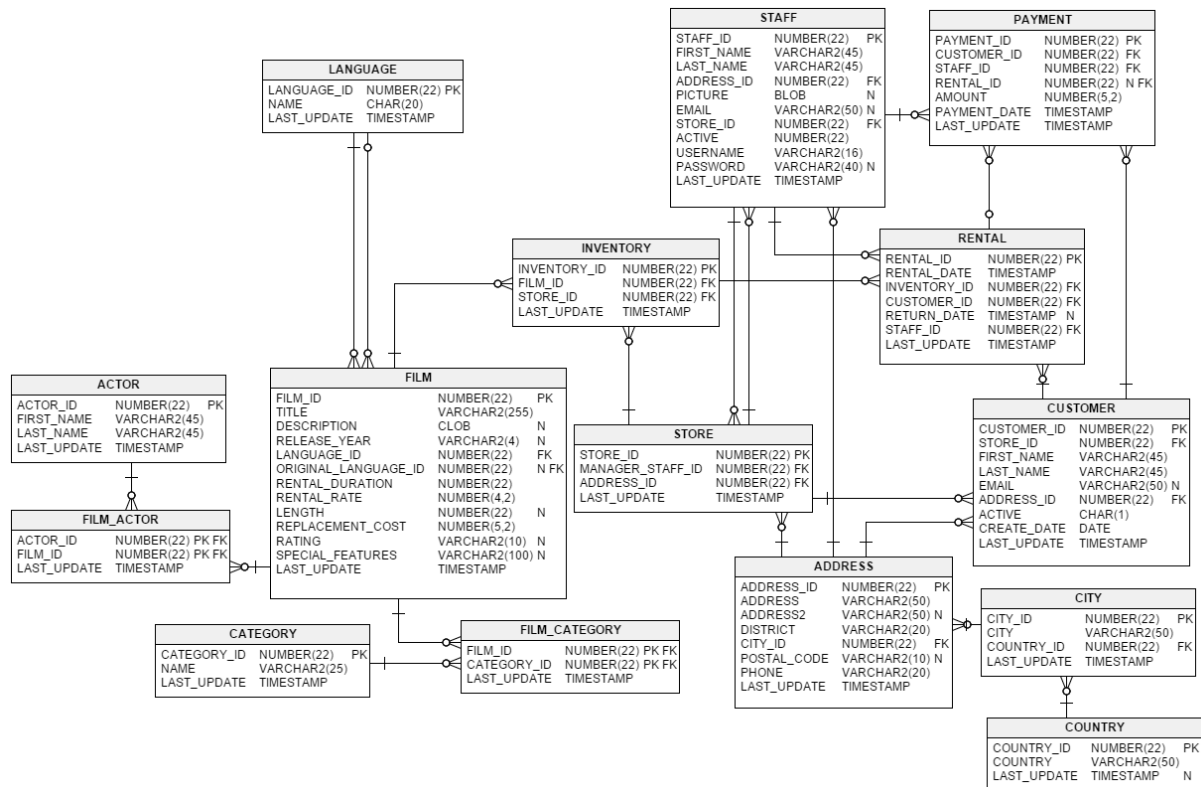|	
COUNTRY_ID	NUMBER(22) PK
COUNTRY	VARCHAR2(50)
LAST_UPDATE	TIMESTAMP N

BASIC QUERIES

1. List all actors' first and last names in alphabetical order.
   Expected output:
   First name, Last name
   Adam, Grant
   Amy, Adams
   Angela, Basset

2. Find all films released in the year 2006.
   Expected output:
   Title, Release year
   Academy Dinosaur, 2006
   Adaptation Holes, 2006

3. Retrieve all unique film categories.
   Expected output:
   Name
   Action
   Comedy
   Drama

4. Get the total number of customers.
   Expected output:

Total customers
599

5. Find all rental records where the return date is null.
   Expected output:
   Rental id, Customer id, Inventory id, Rental date
   1523, 45, 1023, 2024-03-10 14:30:00
   1678, 98, 1289, 2024-03-12 10:15:00

6. Display the names and emails of customers from the city of London.
   Expected output:
   First name, Last name, Email
   John, Doe, john.doe@email.com
   Jane, Smith, jane.smith@email.com

7. List the staff members along with the store they work at.
   Expected output:
   Staff id, First name, Last name, Store id
   1, Mike, Johnson, 1
   2, Sarah, Adams, 2

8. Retrieve a list of countries that have customers.
   Expected output:
   Country
   USA
   Canada
   UK

9. Find all films with a rental duration greater than five days.
   Expected output:
   Film id, Title, Rental duration
   12, The Grand Escape, 7
   25, Mystery Island, 6

10. Get the list of movies that belong to the Action category.
    Expected output:
    Film id, Title
    45, Action Hero Returns
    78, Speed Chase

11. Retrieve the total number of films available in the inventory.
    Expected output:
    Total Films
    1000

12. Find all customers who have never rented a movie.
    Expected output:
    Customer ID, First Name, Last Name

125, Alice, Johnson
178, Mark, Wilson

13. List the top 5 films rented most frequently.
    Expected output:
    Film ID, Title, Rental Count
    12, The Grand Escape, 150
    25, Mystery Island, 140
    78, Speed Chase, 130
    45, Action Hero Returns, 125
    102, The Lost Kingdom, 120

14. Get the average rental rate of movies in each category.
    Expected output:
    Category, Avg Rental Rate
    Action, 2.99
    Comedy, 2.49
    Drama, 3.19

15. Find the names of customers who have rented more than 20 movies.
    Expected output:
    Customer ID, First Name, Last Name, Rental Count
    98, David, Brown, 25
    145, Emma, White, 23

16. List all employees and their total rental transactions handled.
    Expected output:
    Staff ID, First Name, Last Name, Total Rentals
    1, Mike, Johnson, 5000
    2, Sarah, Adams, 4800

17. Retrieve the most rented movie in the Sakila database.
    Expected output:
    Film ID, Title, Total Rentals
    12, The Grand Escape, 150

18. Find the customers who rented movies in the last 30 days.
    Expected output:
    Customer ID, First Name, Last Name, Last Rental Date
    75, Daniel, Lewis, 2024-03-05
    132, Sophia, Green, 2024-03-08

19. Find the revenue generated by each store.
    Expected output:
    Store ID, Total Revenue
    1, 50,000
    2, 48,000

20. Retrieve the longest movies in the database.
    Expected output:
    Film ID, Title, Length (Minutes)
    15, Epic Adventure, 180
    48, The Last Journey, 175

INTERMEDIATE QUERIES

1. Find the number of films available in each category.

Expected Output:
Category, Film count
Action, 55
Comedy, 47
Drama, 62

2. List the top five most rented movies along with their rental count.

Expected Output:
Title, Rental count
Jurassic Hunt, 85
Mystery Island, 78

3. Retrieve the total number of rentals for each customer sorted by most rentals.

Expected Output:
Customer id, First name, Last name, Rental count
102, John, Smith, 15
98, Alice, Johnson, 13

4. Find the highest rental rate of movies in each category.

Expected Output:
Category, Max rental rate
Action, 4.99
Comedy, 3.99

5. Get the names of customers who have rented the movie Academy Dinosaur.

Expected Output:
Customer id, First name, Last name
205, Peter, Griffin
310, Lois, Lane

6. Display a report of total payments collected by each staff member.

Expected Output:
Staff id, First name, Last name, Total collected
1, John, Doe, 5000.00
2, Sarah, Smith, 4800.00

7. Find the total revenue generated by each store.

Expected Output:
Store id, Total revenue
1, 10000.00
2, 9500.00

8. List all movies that have never been rented.

Expected Output:
Film id, Title
150, Unknown Shadows
234, Lost River

9. Identify customers who have rented more than 10 movies.

Expected Output:
Customer id, First name, Last name, Rental count
98, Alice, Johnson, 13
120, Robert, Brown, 11

10. Find the number of rentals made in each month of 2024.

Expected Output:
Month, Rental count
January, 450
February, 380

11. Find customers who have spent more than $100 on rentals.

Expected Output:
Customer id, First name, Last name, Total spent
89, Mark, Wilson, 105.50
115, Emily, Davis, 120.00

12. Get the number of distinct customers who rented movies in the last 30 days.

Expected Output:
Unique customers
56

13. Find the average rental duration for each film category.

Expected Output:
Category, Avg rental duration

Comedy, 5.4 days
Drama, 6.2 days

14. Retrieve the most popular movie category based on rental count.

Expected Output:
Category, Rental count
Action, 120

15. Identify the most loyal customer who has made the highest number of rentals.

Expected Output:
Customer id, First name, Last name, Rentals
132, Michael, Johnson, 35

16. Find the store that has processed the most rentals.

Expected Output:
Store id, Rental count
1, 560

17. Display the average payment amount for each customer.

Expected Output:
Customer id, First name, Last name, Avg Payment
102, John, Smith, 4.75

18. Get the latest rental transaction details.

Expected Output:
Rental id, Customer id, Rental date, Return date
1205, 98, 2024-03-15, 2024-03-17

19. Find customers who have never rented a movie.

Expected Output:
Customer id, First name, Last name
134, Brian, Lee
156, Sophie, Adams

20. Identify staff members who handled the most rentals.

Expected Output:
Staff id, First name, Last name, Rental count
2, Sarah, Smith, 430

21. Get the top three highest-grossing films based on rental revenue.

Expected Output:
Film title, Revenue
Mystery Island, 650.50
Jurassic Hunt, 590.75

22. Retrieve the store that generated the least revenue.

Expected Output:
Store id, Total revenue
2, 9500.00

23. Find customers who rented the same movie more than once.

Expected Output:
Customer id, First name, Last name, Film title
98, Alice, Johnson, Jurassic Hunt

24. List films rented by more than 20 customers.

Expected Output:
Film title, Rental count
Titanic 2, 25
Galaxy Wars, 22

25. Find customers who rented movies but never made a payment.

Expected Output:
Customer id, First name, Last name
190, Jason, Carter

26. Identify films that have been rented more than 50 times but returned late over 10 times.

Expected Output:
Film title, Rental count, Late returns
Treasure Island, 75, 15

27. Retrieve the average late fee charged per customer.

Expected Output:
Customer id, First name, Last name, Avg Late Fee
85, Andrew, Walker, 2.50

28. Identify the least-rented movie category.

Expected Output:
Category, Rental count
Documentary, 10

29. Find the highest rental count per store.

Expected Output:
Store id, Rental count
1, 560

30. Get the average rental duration per store.

Expected Output:
Store id, Avg rental duration
2, 4.8 days

31. Find customers who rented exactly five movies.

Expected Output:
Customer id, First name, Last name
200, Daniel, White

32. Retrieve customers who rented movies in both stores.

Expected Output:
Customer id, First name, Last name
176, Olivia, Garcia

33. Find films that have never been rented in the last six months.

Expected Output:
Film title
Silent Echo

34. Identify employees with the highest average payment per transaction.

Expected Output:
Staff id, First name, Last name, Avg Payment
1, John, Doe, 6.75

35. Get a count of active and inactive customers.

Expected Output:
Status, Count

Active, 450
Inactive, 50

36. Find the most frequently rented movie in the last 3 months.

Expected Output:
Film title, Rental count
Dark Night, 95

37. Retrieve the most common rental duration period.

Expected Output:
Rental duration, Count
7 days, 320

38. Identify customers who have rented more than one movie on the same day.

Expected Output:
Customer id, First name, Last name, Rental date
85, Andrew, Walker, 2024-04-05

39. Find the total rental count of all horror movies.

Expected Output:
Category, Rental count
Horror, 180

ADVANCE QUERIES

40. Find the number of films available in each category.

Expected Output:

Category, Film Count
Action, 55
Comedy, 47
Drama, 62

---

41. List the top five most rented movies along with their rental count.

Expected Output:

Title, Rental Count
Jurassic Hunt, 85
Mystery Island, 78

---

42. Retrieve the total number of rentals for each customer sorted by most rentals.

Expected Output:

Customer ID, First Name, Last Name, Rental Count
102, John, Smith, 15
98, Alice, Johnson, 13

---

43. Find the highest rental rate of movies in each category.

Expected Output:

Category, Max Rental Rate
Action, 4.99
Comedy, 3.99

---

44. Get the names of customers who have rented the movie "Academy Dinosaur".

Expected Output:

Customer ID, First Name, Last Name
205, Peter, Griffin
310, Lois, Lane

---

45. Display a report of total payments collected by each staff member.

Expected Output:

Staff ID, First Name, Last Name, Total Collected
1, John, Doe, 5000.00
2, Sarah, Smith, 4800.00

---

46. Find the total revenue generated by each store.

Expected Output:

Store ID, Total Revenue
1, 10000.00
2, 9500.00

---

47. Retrieve the top three customers who spent the most on rentals.

Expected Output:

Customer ID, First Name, Last Name, Total Spent
34, Daniel, White, 320.00
56, Michael, Lee, 295.00

---

48. Find the movies that have never been rented.

Expected Output:

Film ID, Title
100, Lost in Time
125, Forgotten Heroes

---

49. Identify the staff member with the highest number of rentals.

Expected Output:

Staff ID, First Name, Last Name, Rentals Handled
2, Sarah, Smith, 1020

---

50. Find the most common rental duration for movies.

Expected Output:

Rental Duration (Days), Count
7, 95
5, 80

---

51. Find customers who rented more than 10 movies but spent less than $50.

Expected Output:

Customer ID, First Name, Last Name, Rentals, Total Spent
87, Linda, Harris, 12, 48.00

---

52. Find the longest movie in each category.

Expected Output:

Category, Longest Movie, Length (Minutes)
Action, "Speed Thrill", 150
Drama, "Tears of Yesterday", 180

---

53. Find the customers who rented movies in every category.

Expected Output:

Customer ID, First Name, Last Name
210, Chris, Green

---

54. Find the movies rented by the most customers.

Expected Output:

Movie Title, Customer Count
"Mission Survival", 80

---

55. Find the movie categories that generated the most revenue.

Expected Output:

Category, Total Revenue
Action, 12000.00
Comedy, 9500.00

---

56. Retrieve the five movies that took the longest to return on average.

Expected Output:

Movie Title, Avg Rental Duration (Days)
"Lost in Shadows", 9.5

---

57. Find customers who have never returned a movie late.

Expected Output:

Customer ID, First Name, Last Name
305, Alice, Miller

---

58. Retrieve the top 3 cities with the highest number of rentals.

Expected Output:

City, Rental Count
New York, 1200

---

59. Find staff members who handled more than 500 rentals.

Expected Output:

Staff ID, First Name, Last Name, Rental Count
1, John, Doe, 600

---

60. Find movies that were rented more than 50 times but have a low rental rate.

Expected Output:

Movie Title, Rental Count, Rental Rate
"Comedy Stars", 55, 2.99

---

61. Find the store with the most unique customers.

Expected Output:

Store ID, Unique Customers
1, 350

---

62. Retrieve the five customers with the highest average payment per rental.

Expected Output:

Customer ID, First Name, Last Name, Avg Payment
45, Lisa, Brown, 5.20

---

63. Find customers who have not rented a movie in the past six months.

Expected Output:

Customer ID, First Name, Last Name
150, Robert, Brown

---

64. Retrieve movies with an average rating greater than 8.

Expected Output:

Movie Title, Avg Rating
"Dark City", 8.5

---

65. Find customers who rented only movies from a single category.

Expected Output:

Customer ID, First Name, Last Name, Category
220, Sam, Wilson, Horror

---

66. Identify movies that were rented by at least 10 different customers.

Expected Output:

Movie Title, Customer Count
"Fast Drive", 15

---

67. Find the five most frequently rented movie categories.

Expected Output:

Category, Rental Count
Drama, 800
Comedy, 750

---

68. Find the customers who rented movies every month in the past year.

Expected Output:

Customer ID, First Name, Last Name
90, Andrew, Carter

---

69. Identify the highest-grossing store in terms of rental revenue.

Expected Output:

Store ID, Total Revenue
1, 22000.00

---

70. Retrieve the average number of movies rented per customer.

Expected Output:

Avg Rentals per Customer
6.3

---

71. Find movies rented by customers who spent more than $200.

Expected Output:

Movie Title, Customer ID
"Lost Empire", 32

---

72. Retrieve movies that were returned late more than 30% of the time.

Expected Output:

Movie Title, Late Return Percentage
"Dark Secrets", 45%

---

73. Find the five most expensive movies that have been rented at least once.

Expected Output:

Movie Title, Rental Rate
"Golden King", 5.99

---

74. Retrieve customers who rented movies but never made a payment.

Expected Output:

Customer ID, First Name, Last Name
187, Ryan, White

---

75. Find the total rental count for each film rating (PG, R, etc.).

Expected Output:

Rating, Rental Count
PG, 500
R, 700

---

76. Retrieve the names of all staff members and the number of rentals they processed.

Expected Output:

Staff ID, First Name, Last Name, Rentals Processed
1, John, Doe, 1020
2, Sarah, Smith, 950

77. Identify customers who have spent more than the average total rental payment.

Expected Output:

Customer ID, First Name, Last Name, Total Spent
45, Lisa, Brown, 210.50
67, Kevin, Adams, 198.75

---

78. Find the top 3 stores by total revenue.

Expected Output:

Store ID, Total Revenue
1, 15000.00
2, 13500.00
3, 12800.00

---

79. Retrieve the average movie rental duration for each category.

Expected Output:

Category, Avg Rental Duration
Action, 6.2
Comedy, 5.8
Drama, 7.1

---

80. Find customers who have rented more than 5 movies in the last month.

Expected Output:

Customer ID, First Name, Last Name, Rental Count
123, James, Wilson, 7
189, Emily, Carter, 6