

EDA Summary - Sakila Movie Rental Project

Question 1

Goal and Logic: Compare purchasing behavior of new vs repeat customers based on rental frequency and revenue.

Explanation: Identifies customer type (new/repeat) and evaluates their spending to understand loyalty patterns.

Functions Used: CASE, COUNT(), SUM(), GROUP BY - classify customers, count rentals, and summarize revenue.

Question 2

Goal and Logic: Find which films have highest rental rates and demand, showing popularity vs price.

Explanation: Shows top films by rental rate and frequency to identify high-demand titles.

Functions Used: COUNT(), SUM(), ORDER BY - count rentals, calculate revenue, and rank films.

Question 3

Goal and Logic: Compare staff performance and customer satisfaction through rentals and revenue.

Explanation: Measures performance using rentals and average payment per customer.

Functions Used: JOIN, COUNT(), SUM(), ROUND() - combine tables, count activity, and compute averages.

Question 4

Goal and Logic: Study seasonal trends in customer activity across cities by analyzing month-wise rentals.

Explanation: Displays how rentals change month-to-month across different locations.

Functions Used: MONTH(), DATE_FORMAT(), STR_TO_DATE(), GROUP BY - extract month and group data.

Question 5

Goal and Logic: Check if certain film languages are more popular among customer segments.

Explanation: Shows total rentals and revenue by language to reveal audience preferences.

Functions Used: JOIN, COUNT(), SUM() - link films with languages and aggregate totals.

Question 6

Goal and Logic: Study how customer loyalty affects monthly sales revenue trends.

Explanation: Groups customers by loyalty and shows their revenue contribution over time.

Functions Used: CASE, DATE_FORMAT(), SUM() - classify loyalty and calculate monthly revenue.

Question 7

Goal and Logic: Find which film categories are most popular in each location (city).

Explanation: Shows total rentals per category and city to reveal location-based demand.

Functions Used: JOIN, COUNT(), GROUP BY - connect category data and summarize by city.

Question 8

Goal and Logic: Analyze how staff availability and knowledge affect customer satisfaction.

Explanation: Uses rental volume and average payment to estimate service quality.

Functions Used: COUNT(), SUM(), AVG(), ROUND() - calculate rentals, revenue, and averages.

Question 9

Goal and Logic: Study how store proximity impacts rental frequency.

Explanation: Compares rentals from nearby vs distant customers to measure convenience impact.

Functions Used: CASE, COUNT(), JOIN - classify proximity and count rentals.

Question 10

Goal and Logic: Analyze if different age groups prefer specific film categories (using simulated age groups).

Explanation: Groups customers by ID range and compares category rentals.

Functions Used: CASE, JOIN, COUNT() - create groups and summarize rentals.

Question 11

Goal and Logic: Identify demographics and preferences of top-spending customers.

Explanation: Lists top spenders, their locations, and most-rented film genres.

Functions Used: SUM(), JOIN, ORDER BY - calculate spending and rank results.

Question 12

Goal and Logic: Check how film availability affects satisfaction and repeat rentals.

Explanation: Compares available copies with rental and revenue frequency.

Functions Used: COUNT(), SUM(), GROUP BY - measure inventory vs rentals.

Question 13

Goal and Logic: Find busiest hours/days for each store to guide staff scheduling.

Explanation: Shows rental frequency by day and hour to identify peak times.

Functions Used: DAYNAME(), HOUR(), COUNT(), ORDER BY - extract peak hours and sort results.

Question 14

Goal and Logic: Understand how cultural or regional factors influence film preferences.

Explanation: Analyzes category popularity by country to show regional viewing behavior.

Functions Used: JOIN, COUNT(), GROUP BY - connect country and category data.

Question 15

Goal and Logic: Study how multilingual film availability impacts satisfaction and rentals.

Explanation: Compares films per language with rentals and revenue.

Functions Used: JOIN, COUNT(), SUM(), ROUND() - link language, count rentals, and calculate averages.