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SQL Questions:

- 1. Retrieve all successful bookings:
- 2. Find the average ride distance for each vehicle type:
- 3. Get the total number of canceled rides by customers:
- 4. List the top 5 customers who booked the highest number of rides:
- 5. Get the number of rides canceled by drivers due to personal and car-related issues:
- 6. Find the maximum and minimum driver ratings for Prime Sedan bookings:
- 7. Retrieve all rides where payment was made using UPI:
- 8. Find the average customer rating per vehicle type:
- 9. Calculate the total booking value of rides completed successfully:
- 10. List all incomplete rides along with the reason:

Power BI Questions:

- 1. Ride Volume Over Time
- 2. Booking Status Breakdown
- 3. Top 5 Vehicle Types by Ride Distance
- 4. Average Customer Ratings by Vehicle Type
- 5. Canceled Rides Reasons
- 6. Revenue by Payment Method
- 7. Top 5 Customers by Total Booking Value
- 8. Ride Distance Distribution Per Day
- 9. Driver Ratings Distribution
- 10. Customer vs. Driver Ratings

Data Columns

- 1. Date
- 2. Time
- 3. Booking_ID
- 4. Booking_Status
- 5. Customer ID
- Vehicle_Type
- 7. Pickup_Location
- 8. Drop_Location
- 9. V_TAT

- 10. C_TAT
- 11. Canceled_Rides_by_Customer
- 12. Canceled_Rides_by_Driver
- 13. Incomplete_Rides
- 14. Incomplete_Rides_Reason
- 15. Booking_Value
- 16. Payment_Method
- 17. Ride_Distance
- 18. Driver_Ratings
- 19. Customer_Rating

SQL Answers:

1. Retrieve all successful bookings:

SELECT * FROM bookings WHERE Booking_Status = 'Success';

2. Find the average ride distance for each vehicle type:

SELECT Vehicle_Type, AVG(Ride_Distance) as avg_distance FROM bookings GROUP BY Vehicle_Type;

3. Get the total number of canceled rides by customers:

SELECT COUNT(*) FROM bookings WHERE Booking Status = 'Canceled by Customer';

4. List the top 5 customers who booked the highest number of rides:

SELECT Customer_ID, COUNT(Booking_ID) as total_rides FROM bookings GROUP BY Customer_ID ORDER BY total_rides DESC LIMIT 5;

5. Get the number of rides canceled by drivers due to personal and car-related issues:

SELECT COUNT(*) FROM bookings WHERE Canceled_Rides_by_Driver = 'Personal & Car related issue':

6. Find the maximum and minimum driver ratings for Prime Sedan bookings:

SELECT MAX(Driver_Ratings) as max_rating, MIN(Driver_Ratings) as min_rating FROM bookings WHERE Vehicle_Type = 'Prime Sedan';

7. Retrieve all rides where payment was made using UPI:

SELECT * FROM bookings WHERE Payment_Method = 'UPI';

8. Find the average customer rating per vehicle type:

SELECT Vehicle_Type, AVG(Customer_Rating) as avg_customer_rating FROM bookings GROUP BY Vehicle_Type;

9. Calculate the total booking value of rides completed successfully:

SELECT SUM(Booking_Value) as total_successful_value FROM bookings WHERE Booking_Status = 'Success';

10. List all incomplete rides along with the reason:

SELECT Booking_ID, Incomplete_Rides_Reason FROM bookings WHERE Incomplete_Rides = 'Yes';

Power BI Answers:

Segregation of the views:

- 1. Overall
- Ride Volume Over Time
- Booking Status Breakdown

2. Vehicle Type

Top 5 Vehicle Types by Ride Distance

3. Revenue

- Revenue by Payment Method
- Top 5 Customers by Total Booking Value
- Ride Distance Distribution Per Day

4. Cancellation

- Canceled Rides Reasons (Customer)
- Canceled Rides Reasons(Drivers)

5. Ratings

- Driver Ratings
- Customer Ratings

Answers:

- **1. Ride Volume Over Time:** A time-series chart showing the number of rides per day/week.
- **2. Booking Status Breakdown:** A pie or donut chart displaying the proportion of different booking statuses (success, canceled by customer, canceled by driver, etc.).
- **3. Top 5 Vehicle Types by Ride Distance:** A bar chart ranking vehicle types based on the total distance covered.
- **4. Average Customer Ratings by Vehicle Type:** A column chart showing the average customer ratings for different vehicle types.
- **5. Canceled Rides Reasons:** A bar chart that highlights the common reasons for ride cancellations by customers and drivers.
- **6. Revenue by Payment Method:** A stacked bar chart displaying total revenue based on payment methods (Cash, UPI, Credit Card, etc.).
- **7. Top 5 Customers by Total Booking Value:** A leaderboard visual listing customers who have spent the most on bookings.
- **8. Ride Distance Distribution Per Day:** A histogram or scatter plot showing the distribution of ride distances for different Dates.
- **9. Driver Ratings Distribution:** A box plot visualizing the spread of driver ratings for different vehicle types.
- **10. Customer vs. Driver Ratings:** A scatter plot comparing customer and driver ratings for each completed ride, analyzing correlations.

SQL Questions & Answers

Create Database Ola; Use Ola:

#1. Retrieve all successful bookings:

Create View Successful_Bookings As SELECT * FROM bookings WHERE Booking_Status = 'Success';

#2. Find the average ride distance for each vehicle type:

Create View ride_distance_for_each_vehicle As SELECT Vehicle_Type, AVG(Ride_Distance) as avg_distance FROM bookings GROUP BY Vehicle_Type;

#3. Get the total number of canceled rides by customers:

Create View canceled_rides_by_customers As SELECT COUNT(*) FROM bookings WHERE Booking_Status = 'Canceled by Customer';

#4. List the top 5 customers who booked the highest number of rides:

Create View Top_5_Customers As SELECT Customer_ID, COUNT(Booking_ID) as total_rides FROM bookings GROUP BY Customer_ID ORDER BY total_rides DESC LIMIT 5;

#5. Get the number of rides canceled by drivers due to personal and car-related issues:

Create View Rides_Canceled_by_Drivers_P_C_Issues As SELECT COUNT(*) FROM bookings WHERE Canceled_Rides_by_Driver = 'Personal & Car related issue';

#6. Find the maximum and minimum driver ratings for Prime Sedan bookings:

Create View Max_Min_Driver_Rating As SELECT MAX(Driver_Ratings) as max_rating, MIN(Driver_Ratings) as min_rating FROM bookings WHERE Vehicle_Type = 'Prime Sedan';

#7. Retrieve all rides where payment was made using UPI:

Create View UPI_Payment As SELECT * FROM bookings WHERE Payment_Method = 'UPI';

#8. Find the average customer rating per vehicle type:

Create View AVG_Cust_Rating As SELECT Vehicle_Type, AVG(Customer_Rating) as avg_customer_rating FROM bookings GROUP BY Vehicle_Type;

#9. Calculate the total booking value of rides completed successfully:

Create View total_successful_ride_value As SELECT SUM(Booking_Value) as total_successful_ride_value FROM bookings WHERE Booking_Status = 'Success';

#10. List all incomplete rides along with the reason:

Create View Incomplete_Rides_Reason As SELECT Booking_ID, Incomplete_Rides_Reason FROM bookings
WHERE Incomplete_Rides = 'Yes';

Retrieve All Answers

#1. Retrieve all successful bookings:

Select * From Successful_Bookings;

#2. Find the average ride distance for each vehicle type:

Select * from ride_distance_for_each_vehicle;

#3. Get the total number of canceled rides by customers:

Select * from canceled_rides_by_customers;

#4. List the top 5 customers who booked the highest number of rides:

Select * from Top_5_Customers;

#5. Get the number of rides canceled by drivers due to personal and car-related issues:

Select * from Rides_Canceled_by_Drivers_P_C_Issues;

#6. Find the maximum and minimum driver ratings for Prime Sedan bookings:

Select * from Max_Min_Driver_Rating;

#7. Retrieve all rides where payment was made using UPI:

Select * from UPI_Payment;

#8. Find the average customer rating per vehicle type:

Select * from AVG_Cust_Rating;

#9. Calculate the total booking value of rides completed successfully:

Select * from total_successful_ride_value;

#10. List all incomplete rides along with the reason:

Select * from Incomplete_Rides_Reason;