OLA DATA ANALYTICS

SQL QUERY 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 cancelled rides by customers:
Create View Cancelled_rides_by_customer 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 cancelled by drivers due to personal and car-related issues:
Create View Rides_cancelled_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';
```

FINAL 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 cancelled rides by customers:
```
Select * from Cancelled_rides_by_customer;
```

#4. List the top 5 customers who booked the highest number of rides:
```
Select * from Top_5_Customers;
```

#5. Get the number of rides cancelled by drivers due to personal and car-related issues:
```
Select * from Rides_cancelled_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;

Power BI Answers:

Segregation of the views:

Overall

- Ride Volume Over Time
- Booking Status Breakdown

1. **Vehicle Type**

- Top 5 Vehicle Types by Ride Distance

2. **Revenue**

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

3. **Cancellation**

- Cancelled Rides Reasons (Customer)
- cancelled Rides Reasons(Drivers)

4. **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 doughnut chart displaying the proportion of different booking statuses (success, cancelled by the customer, cancelled by the 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. **cancelled 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 Rating 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.