

Data Analyst Project

**ChatGPT Prompt to Create Data**

**Please create a spreadsheet with 1 lac rows, for Bengaluru city. Give the following columns. The data will be for 1 month. use the following column -**

1. Date
2. Time
3. Booking ID
4. Booking Status
5. Customer ID
6. Vehicle Type
   * Auto
   * Prime Plus
   * Prime Sedan
   * Mini
   * Bike
   * eBike
   * Prime SUV
7. Pickup Location (Create dummy location points Take any 50 areas from Bangalore)
8. Drop Location (Take from dummy pickup locations)
9. Avg VTAT (Time taken to arrive at the vehicle)
10. Avg CTAT (Time taken to arrive the Customer)
11. Cancelled Rides by Customer
12. Reason for cancelling by Customer

* Driver is not moving towards pickup location
* Driver asked to cancel
* AC is not working (Only for 4-wheelers)
* Change of plans
* Wrong Address

13. Cancelled Rides by Driver

* Personal & Car related issues
* Customer related issue
* The customer was coughing/sick
* More than permitted people in there

1. Incomplete Rides
2. Incomplete Rides Reason

* Customer Demand
* Vehicle Breakdown
* Other Issue

1. Booking Value
2. Ride Distance
3. Driver Ratings
4. Customer Rating

Keep the overall booking status success for this data at 62%. If the booking status is successful, then only fare charge ratings, average VTAT, average CTAT, and other data will be there.

Make sure orders cancelled by customers should not be more than 7%

Make sure orders cancelled drivers should not be more than 18%

SQL Questions:

1. Retrieve all successful bookings:
2. Find the average ride distance for each vehicle type:
3. Get the total number of cancelled rides by customers:
4. List the top 5 customers who booked the highest number of rides:
5. Get the number of rides cancelled 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. cancelled 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 6. Vehicle\_Type 7. Pickup\_Location 8. Drop\_Location 9. V\_TAT | 1. C\_TAT 2. cancelled\_Rides\_by\_Customer 3. cancelled\_Rides\_by\_Driver 4. Incomplete\_Rides 5. Incomplete\_Rides\_Reason 6. Booking\_Value 7. Payment\_Method 8. Ride\_Distance 9. Driver\_Ratings 10. Customer\_Rating |

SQL Answers:

1. **Retrieve all successful bookings:**

SELECT \* FROM bookings WHERE Booking\_Status = 'Success';

1. **Find the average ride distance for each vehicle type:**

SELECT Vehicle\_Type, AVG(Ride\_Distance) as avg\_distance FROM bookings GROUP BY Vehicle\_Type;

1. **Get the total number of cancelled rides by customers:**

SELECT COUNT(\*) FROM bookings WHERE Booking\_Status = 'cancelled by Customer';

1. **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;

1. **Get the number of rides cancelled by drivers due to personal and car-related issues:** SELECT COUNT(\*) FROM bookings WHERE cancelled\_Rides\_by\_Driver = 'Personal & Car

related issue';

1. **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';
2. **Retrieve all rides where payment was made using UPI:** SELECT \* FROM bookings WHERE Payment\_Method = 'UPI';
3. **Find the average customer rating per vehicle type:**

SELECT Vehicle\_Type, AVG(Customer\_Rating) as avg\_customer\_rating FROM bookings

GROUP BY Vehicle\_Type;

1. **Calculate the total booking value of rides completed successfully:**

SELECT SUM(Booking\_Value) as total\_successful\_value FROM bookings WHERE

Booking\_Status = 'Success';

1. **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
  1. **Vehicle Type**

- Top 5 Vehicle Types by Ride Distance

* 1. **Revenue**
  + Revenue by Payment Method
  + Ride Distance Distribution Per Day
  1. **Cancellation**
  + Cancelled Rides Reasons (Customer)
  + cancelled Rides Reasons(Drivers)
  1. **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.

# 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 cancelled rides by customers:**

Create View cancelled\_rides\_by\_customers As

SELECT COUNT(\*) FROM bookings

WHERE Booking\_Status = 'cancelled 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 cancelled\_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 cancelled rides by customers:** Select \* from cancelled\_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 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;