SQL-Indore-Ola-Ride-Analysis

Basic Level:

1. Retrieve all records from the booking table.
2. Find the total number of bookings in the booking table.
3. Retrieve all bookings where Booking_Status is "Completed".
4. Retrieve the first 10 records from the booking table.
5. Find the customers (Customer_ID) who have booked more than 3 rides.
6. Get the total number of cancelled rides by customers.
7. Retrieve the total booking amount for rides that were successfully completed.
8. Retrieve the number of Booking where driver rating is above 4.5.
9. Find the average ride distance for each vehicle type.
10. Get the number of rides cancelled by drivers due to personal and car-related issues.

Intermediate Level:

11. Find the number of rides per vehicle type.
12. Calculate the average ride fare for all successful rides.
13. Get the highest ride distance for each vehicle type.
14. List the top 5 customers who have spent the most on bookings.
15. Find all customers who have made bookings in multiple locations.
16. Find the most popular vehicle type based on the number of bookings.

Advanced Level:

17. Find the total ride distance for each vehicle type and display it in descending order.
18. Calculate the percentage of rides that were canceled by drivers.
19. Retrieve the most frequent cancellation reasons provided by customers.

Solutions

BASIC LEVEL QUESTIONS

--1. Retrieve all records from the booking table.

```
SELECT * FROM booking;
```

--2. Find the total number of bookings in the booking table.

```
select count(*) as Total_Booking from booking;
```

--3. Retrieve all bookings where Booking_Status is "Completed".

```
select * from booking
where booking_status = 'success';
```

--4. Retrieve the first 10 records from the booking table.

```
select top 10 * from booking;
```

--5. Find the customers (Customer_ID) who have booked more than 3 rides.

```
select customer_id,count(*) as Number_of_booking from booking
group by customer_id
having count(*) >3;
```

--6.Get the total number of cancelled rides by customers

```
select count(*) as number_of_cancel_rides from booking
where Canceled_Rides_by_Customer = 1;
```

```
--7. Retrieve the total booking amount for rides that were successfully completed.
select sum(booking_value) as Total_booking_amount
from booking
where booking_status = 'success';

--8. Retrieve the number of Booking where driver rating above 4.5
select count(*) as Number_of_booking from booking
where driver_ratings > 4.5;

--9.  Find the average ride distance for each vehicle type
select vehicle_type, avg(ride_distance) as avg_distance from booking
group by vehicle_type
order by avg(ride_distance) desc;

--10. Get the number of rides cancelled by drivers due to personal and car-related issues
select count(*) as Cancelled_rides from booking
where Reason_for_canceling_by_Driver = 'Personal & Car related issue';
```

Intermediate Level

```
-- 11. Find the number of rides per vehicle type.
SELECT vehicle_type,count(*) as Number_of_rides
from booking
group by vehicle_type
order by count(*) desc;
```

```
--12. Calculate the average ride fare for all successful rides.
select avg(booking_value) as average_fare from booking
where booking_status = 'success';

--13. Get the highest ride distance for each vehicle type.
select vehicle_type, max(ride_distance) AS max_distance
from booking
group by vehicle_type;

-- 14. List the top 5 customers who have spent the most on bookings.
select top 5 customer_id,sum(booking_value) as Total_spending
from booking
group by customer_id
order by sum(booking_value);

--15. Find all customers who have made bookings in multiple locations.
select customer_id from booking
group by customer_id
having count(distinct drop_location) > 1;


--16. Find the most popular vehicle type based on the number of bookings.
select top 1 vehicle_type,count(*) as Number_of_booking from booking
group by vehicle_type
order by count(*) desc;
```

Advanced Level

--17. Find the total ride distance for each vehicle type and display it in descending order.

```
select vehicle_type,round(sum(ride_distance),2) as total_ride_distance from booking
group by vehicle_type
order by sum(ride_distance);
```

--18. Calculate the percentage of rides that were canceled by drivers.

```
select (count(case when canceled_rides_by_driver = 1 then 1 end) * 100.0 / count(*))  as driver_cancellation_percentage
from booking
where booking_status != 'success';
```

--19. Retrieve the most frequent cancellation reasons provided by customers.

```
select reason_for_canceling_by_customer,count(*) as frequency
from booking
group by reason_for_canceling_by_customer
order by count(*) desc;
```

prompt use to create dataset using chatgpt

Please create a spreadsheet with 1 lac rows, for indore city, give the following columns.
The data will be for 1 month. use following column -
Date
Time
Booking ID
Booking Status
Customer ID
Vehicle Type

- Auto
- Prime Plus
- Prime Sedan
- Mini
- Bike
- eBike
- Prime SUV
  Pickup Location (Create dummy location points Take any 50 areas
  from indore)
  Drop Location (Take from dummy pickup locations)
  Avg VTAT (Time taken to arrive the vehicle)
  Avg CTAT (Time taken to arrive the Customer)
  Canceled Rides by Customer
  Reason for canceling 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
  Canceled Rides by Driver
  Personal & Car related issue
  Customer related issue
  Customer was coughing/sick More than permitted people in there
  Incomplete Rides
  Incomplete Rides Reason
  Customer Demand
  Vehicle Breakdown
  Other Issue
  Booking Value
  Ride Distance
  Driver Ratings
  Customer Rating
  Keep overall booking status success for this data 62%. If booking status is success then only fare charges ratings, Avg VTAT, Avg CTAT and other will be there.
  Make sure order canceled by customers should not be more than 7%
  Make sure order canceled byDrivers should not be more than 18%
  Also, make sure to increase the number of orders on weekends and match days. keep match day by using the following dates.
  keep incomplete rides less than 6%
  Keep order value high on weekends
  in Food Category keep around 67 Indian
  keep order id with 10 digit start with CNR and then digits
  keep orders under 500 value 70% keep orders above 500 value 28% keep remaining orders above 1000