## RDBMS Task #2

## Ride Application Task

1. **Retrieve the names and contact details of all drivers with a rating of 4.5 or higher**

SELECT FirstName, LastName, Phone, City, Rating FROM Drivers WHERE Rating >= 4.5

1. **Find the total number of rides completed by each driver.**

SELECT d.FirstName, d.LastName, COUNT(r.RideID) FROM Drivers d JOIN Rides r ON d.DriverID=r.DriverID GROUP BY d.DriverID

1. **List all riders who have never booked a ride.**

SELECT R.FirstName, R.LastName, R.City FROM Riders R LEFT JOIN Rides r1 ON R.RiderID=r1.RiderID WHERE r1.RiderID IS NULL GROUP BY R.RiderID

1. **Calculate the total earnings of each driver from completed rides.**

SELECT d.FIRSTName,d.LastName, SUM(p.Amount) FROM Drivers d LEFT JOIN Rides r ON d.DriverID=r.DriverID JOIN Payments p ON p.RideID=r.RideID WHERE r.RideStatus='Completed' GROUP BY d.DriverID

1. **Retrieve the most recent ride for each rider**

SELECT r1.RideID, R.FirstName, R.LastName, r1.RideDate, r1.PickupLocation, r1.DropLocation, r1.Distance, r1.RideStatus FROM Riders R JOIN Rides r1 ON R.RiderID=r1.RiderID GROUP BY R.RiderID ORDER BY RideDate ASC

1. **Count the number of rides taken in each city**

SELECT d.City, COUNT(r.RideID) as Rides FROM Drivers d LEFT JOIN Rides r ON d.DriverID=r.DriverID GROUP BY d.City

1. **List all rides where the distance was greater than 20 km**

SELECT \* FROM Rides WHERE Distance>20

1. **Identify the most preferred payment method.**

SELECT PaymentMethod FROM Payments GROUP BY PaymentMethod ORDER BY COUNT(PaymentID) DESC LIMIT 1

1. **Find the top 3 highest-earning drivers.**

SELECT d.FirstName, d.LastName, SUM(p.Amount) FROM Drivers d JOIN Rides r ON d.DriverID=r.DriverID JOIN Payments P ON p.RideID=r.RideID GROUP BY d.DriverID ORDER BY SUM(p.Amount) DESC LIMIT 3

1. **. Retrieve details of all canceled rides along with the rider's and driver's names**

SELECT r.FirstName as Rider\_Name, r.LastName as Rider\_surname, d.FirstName as Driver\_Name, d.LastName as Driver\_Surname, r1.RideID, r1.PickupLocation, r1.DropLocation, r1.Distance, r1.Fare, r1.RideStatus FROM Rides r1 JOIN Riders r ON r.RiderID=r1.RiderID JOIN Drivers d on d.DriverID=r1.DriverID WHERE r1.RideStatus='Cancelled'