Internship Task - RDBMS and SQL Task #2

(1)create database

query=>

CREATE DATABASE ola;

(2)Use Database

query=>

use ola;

(3)create table DRIVERS

query=>

CREATE TABLE Drivers(

DriverID INT Primary Key,

FirstName VARCHAR(100) NOT NULL,

LastName VARCHAR(100) NOT NULL,

Phone VARCHAR(20),

City VARCHAR(100) NOT NULL,

VehicleType VARCHAR(50),

Rating DECIMAL(2,1) NOT NULL

);

(4)Create table riders

query=>

CREATE TABLE Riders(

RiderID INT Primary Key,

FirstName VARCHAR(100) NOT NULL,

LastName VARCHAR(100) NOT NULL,

Phone VARCHAR(20),

City VARCHAR(100) NOT NULL,

JoinDate DATE

);

(5)Create table Rides

query=>

CREATE TABLE Rides(

RideID INT Primary Key,

RiderID INT,

FOREIGN KEY (RiderID) REFERENCES Riders(RiderID),

DriverID INT,

FOREIGN KEY (DriverID) REFERENCES Drivers(DriverID),

RideDate DATETIME,

PickupLocation VARCHAR(255),

DropLocation VARCHAR(255),

Distance DECIMAL(10,2),

Fare DECIMAL(10,2),

RideStatus VARCHAR(50)

);

(6)Create table Payments

query=>

CREATE TABLE Payments

(PaymentID INT Primary Key,

RideID INT,

Foreign Key (RideID) REFERENCES Rides(RideID),

PaymentMethod VARCHAR(50),

Amount DECIMAL(10,2),

PaymentDate DATETIME

);

(7)Insert data in table Drivers

query=>

INSERT INTO Drivers

VALUES

(1, 'SHIVA', 'DIWAN', '9078675645', 'BHOPAL', 'Sedan', 4.7),

(2, 'ANUJ', 'PARE', '8765432345', 'INDORE', 'SUV', 4.9),

(3, 'AMBER', 'SEN', '9078563423', 'GWALIOR', 'Hatchback', 4.5),

(4, 'AKSHAY', 'SHREENIWAS', '8769504536', 'JABALPUR', 'Sedan', 4.8),

(5, 'SHIVAM', 'SHARMA', '7089563423', 'PUNE', 'SEDAN', 4.6),

(6, 'NITIN', 'RAJPUT', '7089567983', 'BOMBAY', 'SUV', 4.7),

(7, 'SHEKHAR', 'GURJAR', '7568764589', 'UJJAIN', 'Sedan', 4.4),

(8, 'SANTANU', 'SAHU', '9097628534', 'DEWAS', 'Hatchback', 4.9),

(9, 'DEV', 'SINGH', '8756342345', 'HARDA', 'HATCHBACK', 4.3),

(10, 'OJAS', 'SOLANKI', '7896456734', 'REWA', 'Sedan', 4.8);

(8)Insert data in table Riders

query=>

INSERT INTO Riders

VALUES

(101, 'SARANSH', 'RAJPUT', '9876543245', 'INDORE', '2023-05-12'),

(102, 'ADITYA', 'SONARE', '8076566767', 'BHOPAL', '2022-09-23'),

(103, 'YOGENDRA', 'SOLANKI', '7867574893', 'PUNE', '2021-11-05'),

(104, 'ATISHAY', 'VERMA', '7856372867', 'BOMBAY', '2020-01-16'),

(105, 'KANHA', 'RAJPUT', '9087626354', 'HARDA', '2021-06-30'),

(106, 'CHINU', 'PAWAR', '7978458978', 'DEWAS', '2023-07-19'),

(107, 'SHIKHAR', 'SHARMA', '9094655678', 'JABALPUR', '2020-12-11'),

(108, 'MANISH', 'PARE', '8729101937', 'UJJAIN', '2022-02-02'),

(109, 'SHIVAM', 'SEN', '7574748978', 'BHOPAL', '2023-03-25'),

(110, 'DaNISH', 'KHAN', '7867483972', 'INDORE', '2022-08-14');

(9)Insert data in table Rides

query=>

INSERT INTO Rides

VALUES

( 201,101,1, '2025-01-01 08:00:00', '123 Main St', '456 LIG', 5.50, 12.75, 'Completed'),

( 202,102,2, '2025-01-02 09:15:00', '789 Pine Rd', '101 MIG', 7.20, 15.50, 'Completed'),

( 203,103,3, '2025-01-03 10:30:00', '345 GEETA BHAWAN', '678 MARI MATA', 4.75, 11.00, 'Completed'),

( 204,104,4, '2025-01-04 12:45:00', '678 NAGAR NIGAM', '234 KHAJRANA', 6.10, 14.00, 'Completed'),

( 205,105,5, '2025-01-05 14:00:00', '101 NEAR RAJBADA', '567 VIJAY NAGAR', 8.00, 18.25, 'Completed'),

( 206,106,6, '2025-01-06 15:30:00', '123 SHIV SHAKTI NAGAR', '890 BYPASS Rd', 9.50, 21.00, 'In Progress'),

( 207,107,7, '2025-01-07 16:45:00', '456 Pine Rd', '123 MAIN ROAD', 3.25, 9.00, 'Completed'),

( 208,108,8, '2025-01-08 17:00:00', '234 MARI MATA', '890 KHAJRANA', 10.30, 22.75, 'Completed'),

( 209,109,9, '2025-01-09 18:15:00', '678 VIJAY NAGAR', '123 Pine Rd', 11.20, 24.00, 'Completed'),

( 210,110,10, '2025-01-10 19:30:00', '345 TEEN IMLI', '567 VIJAY NAGAR', 12.40, 26.50, 'In Progress');

(10)Insert data in table Payments

query=>

INSERT INTO Payments

VALUES

(1, 201, 'Credit Card', 12.75, '2025-01-01 08:30:00'),

(2, 202, 'Cash', 15.50, '2025-01-02 09:45:00'),

(3, 203, 'Debit Card', 11.00, '2025-01-03 10:50:00'),

(4, 204, 'Credit Card', 14.00, '2025-01-04 12:55:00'),

(5, 205, 'PayPal', 18.25, '2025-01-05 14:15:00'),

(6, 206, 'Cash', 21.00, '2025-01-06 15:40:00'),

(7, 207, 'Credit Card', 9.00, '2025-01-07 16:50:00'),

(8, 208, 'Debit Card', 22.75, '2025-01-08 17:25:00'),

(9, 209, 'Credit Card', 24.00, '2025-01-09 18:40:00'),

(10, 210, 'PayPal', 26.50, '2025-01-10 19:50:00');

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Assignment Queries

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

query=>

SELECT FirstName, LastName, Phone, Rating

FROM Drivers

WHERE Rating >= 4.5;

2. Find the total number of rides completed by each driver.

query=>

SELECT DriverID, COUNT(\*) AS TotalRides

FROM Rides

WHERE RideStatus = 'Completed'

GROUP BY DriverID;

3. List all riders who have never booked a ride.

query=>

SELECT FirstName, LastName, Phone

FROM Riders

WHERE RiderID NOT IN (SELECT DISTINCT RiderID FROM Rides);

4. Calculate the total earnings of each driver from completed rides.

query=>

SELECT d.DriverID, d.FirstName, d.LastName, SUM(r.Fare) AS TotalEarnings

FROM Drivers d

JOIN Rides r ON d.DriverID = r.DriverID

WHERE r.RideStatus = 'Completed'

GROUP BY d.DriverID;

5. Retrieve the most recent ride for each rider.

query=>

SELECT r.RiderID, r.RideID, r.RideDate, r.PickupLocation, r.DropLocation

FROM Rides r

WHERE r.RideID IN (

SELECT MAX(RideID)

FROM Rides

GROUP BY RiderID

);

6. Count the number of rides taken in each city.

query=>

SELECT rides.PickupLocation AS city, COUNT(rides.RideID) AS RideCount

FROM Rides

GROUP BY rides.PickupLocation;

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

query=>

SELECT \* FROM Rides

WHERE Distance > 20;

8. Identify the most preferred payment method.

query=>

SELECT PaymentMethod, COUNT(\*) AS Frequency

FROM Payments

GROUP BY PaymentMethod

ORDER BY Frequency DESC

LIMIT 1;

9. Find the top 3 highest-earning drivers.

query=>

SELECT drivers.DriverID, drivers.FirstName, drivers.LastName, SUM(payments.Amount) AS TotalEarnings

FROM Drivers

JOIN Rides ON drivers.DriverID = rides.DriverID

JOIN Payments ON rides.RideID = payments.RideID

WHERE rides.RideStatus = 'Completed'

GROUP BY drivers.DriverID

ORDER BY TotalEarnings DESC

LIMIT 3;

10. Retrieve details of all cancelled rides along with the rider's and driver's names

query=>

SELECT rides.RideID, rides.RideDate, rides.PickupLocation, rides.DropLocation, riders.FirstName AS RiderFirstName, riders.LastName AS RiderLastName, drivers.FirstName AS DriverFirstName, drivers.LastName AS DriverLastName

FROM Rides

JOIN Riders ON rides.RiderID = riders.RiderID

JOIN Drivers ON rides.DriverID = drivers.DriverID

WHERE rides.RideStatus = 'Cancelled';

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