

-- ASSIGNMENT ON DATA MANIPULATION LANGUAGE (DML)

-- The objective here is to implement SQL DML queries to manage records within the database tables defined in the relational schema.

CREATE DATABASE FLEET_MANAGEMENT

-- making use of the database created

USE FLEET_MANAGEMENT

DROP TABLE Vehicle

CREATE TABLE Vehicle (

LicensePlate VARCHAR(20) PRIMARY KEY,

Make VARCHAR(50),

Model VARCHAR(30),

Year VARCHAR(50),

Color VARCHAR(30),

VIN VARCHAR(50),

);

--Creating a table called 'Drivers Table'

drop table Drivers

CREATE TABLE Drivers (

FirstName VARCHAR(20),

LastName VARCHAR(50),

LicenseNumber VARCHAR(30),

Phone VARCHAR(50),

Address VARCHAR(30),

City VARCHAR(50),

```

    State VARCHAR (50),

    zipcode VARCHAR(20),

);

-- Error on DriversID to DriversTable ID


--Creating a table called 'Trips Table'

drop table Trips

CREATE TABLE Trips (

    VehicleID INT PRIMARY KEY,

    DriverID VARCHAR (30),

    Start_Date DATE,

    End_Date DATE,

    Start_location VARCHAR(150),

    End_location VARCHAR(150),

    Distance VARCHAR (30)

);


-- Creating Maintenance Table

CREATE TABLE Maintenance (

    VehicleID INT PRIMARY KEY,

    MaintenanceDate DATE,

    Description Varchar (150),

    Cost Decimal (10,2),

);


--Insert records into the Vehicles table

Insert INTO Vehicle

Values('ABC123', 'Toyota', 'Corolla', '2020', 'White', '1HGCM82633A004352'),

```

```
('XYZ789', 'Ford', 'Fusion', '2018', 'Blue', '2HGCM82633A004353');
```

```
--Insert records into the Vehicle Drivers
```

```
Values('Michael', 'Smith', 'D1234567', '1234567890', '123 Main St', 'Anytown', 'CA', '12345'),
```

```
('Sarah', 'Connor', 'D7654321', '0987654321', '456 Elm St', 'Otherville', 'NY', '54321');
```

```
--Insert records into the Vehicle Trips
```

```
Insert INTO Trips
```

```
Values('1', '1', '2024-07-01', '2024-07-02', 'Los Angeles', 'San Francisco', '380'),
```

```
('2', '2', '2024-07-03', '2024-07-04', 'New York', 'Washington D.C.', '225');
```

```
--Insert records into the Vehicle Maintenance
```

```
Insert INTO Maintenance
```

```
Values('1', '2024-06-15', 'Oil change', '50.00'),
```

```
('2', '2024-06-20', 'Tire replacement', '300.00');
```

```
-- Update the cost of the second maintenance record to 350.00.
```

```
SELECT * FROM Maintenance
```

```
Update Maintenance
```

```
set Cost = 350.00
```

```
where VehicleID = 2
```

```
-- Delete the first vehicle from the Vehicles table.
```

```
SELECT * FROM Vehicle
```

```
delete from Vehicle
```

```
where LicensePlate = 'ABC123'
```

--Insert one more record into the Trips table with the following details:

INSERT INTO TRIPS (VehicleID, DriverID, Start_Date, End_date, Start_Location,End_Location, distance)

VALUES ('3', '1','2024-07-05', '2024-07-06', 'Boston', 'Philadelphia', '300');

SELECT * FROM Trips

--Update the color of the second vehicle in the Vehicles table to "Red".

--Insert records into the Vehicles table

SELECT * from Vehicle

update Vehicle

set Color = 'Red'

where color = 'blue'

-- Insert a new maintenance record into the Maintenance table with the following details:

SELECT * FROM Maintenance

UPDATE Maintenance

SET VehicleID = '1', MaintenanceDate = '2024-07-10', Description= 'Brake inspection', Cost = '100.00'

WHERE VehicleID = 1;

-- Update the phone number of the first driver in the Drivers table to "2223334444".

SELECT * FROM Drivers

UPDATE Drivers

SET Phone = '2223334444'

WHERE Phone = '1234567890'

-- Delete the trip with TripID = 2 from the Trips table.

SELECT * FROM Trips

DELETE FROM Trips

WHERE VehicleID = 2;