## **HEXAWARE CODING CHALLENGE**

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## GITHUB sql file link:

https://github.com/sahithya007/HEXAWARE ASSIGNMENT/blob/mai n/SQLQuery8\_CODING\_CHALLENGE.sql

## TASK-1

1. Update the daily rate for a Mercedes car to 68.

```
UPDATE Vehicle
 SET dailyRate = 68
 WHERE make = 'Mercedes' AND model = 'C-Class';
```

	vehicleID	make	model	year	dailyRate	status	passengerCapacity	engineCapacity
1	1	Toyota	Camry	2022	50.00	available	4	1450
2	2	Honda	Civic	2023	45.00	available	7	1500
3	3	Ford	Focus	2022	48.00	notAvailable	4	1400
4	4	Nissan	Altima	2023	52.00	available	7	1200
5	5	Chevrolet	Malibu	2022	47.00	available	4	1800
6	6	Hyundai	Sonata	2023	49.00	notAvailable	7	1400
7	7	BMW	3 Series	2023	60.00	available	7	2499
8	8	Mercedes	C-Class	2022	68.00	available	8	2599
9	9	Audi	A4	2022	55.00	notAvailable	4	2500
10	10	Lexus	ES	2023	54.00	available	4	2500

2. Delete a specific customer and all associated leases and payments.

```
DELETE FROM Payment WHERE leaseID IN (SELECT leaseID FROM Lease WHERE customerID = 1);
DELETE FROM Lease WHERE customerID = 1;
DELETE FROM Customer WHERE customerID = 1;
```

3. Rename the "paymentDate" column in the Payment table to "transactionDate".

```
EXEC sp_rename 'Payment.paymentDate', 'transactionDate',
                                                         'COLUMN'
```



Caution: Changing any part of an object name could break scripts and stored procedures.

Completion time: 2024-09-19T17:33:35.1026185+05:30

	paymentID	leaseID	transactionDate	amount
1	2	2	2023-02-20	1000.00
2	3	3	2023-03-12	75.00
3	4	4	2023-04-25	900.00
4	5	5	2023-05-07	60.00
5	6	6	2023-06-18	1200.00
6	7	7	2023-07-03	40.00
7	8	8	2023-08-14	1100.00
8	9	9	2023-09-09	80.00
9	10	10	2023-10-25	1500.00

4. Find a specific customer by email.

```
SELECT * FROM Customer WHERE email = 'olivia@example.com';
```

<b>III</b>	Results 🗐 N	Messages				
			lastName	email	phoneNumbe	
1	10	Olivia	Adams	olivia@example.com	555-765-4321	

5. Get active leases for a specific customer.

```
-- Define the customer ID you want to query
   DECLARE @CustomerID INT = 3; -- Replace with the specific customerID you want
     DECLARE @CurrentDate DATE = CAST(GETDATE() AS DATE);
     -- Query to retrieve active leases for the specified customer
   SELECT C.customerID, C.firstName, C.lastName, C.email, C.phoneNumber, V.vehicleID, V.make, V.model, V.year, V.dailyRate, V.status,
            L.leaseID, L.startDate, L.endDate, L.type AS leaseType
     FROM Lease L
     JOIN Customer C ON L.customerID = C.customerID
     JOIN Vehicle V ON L.vehicleID = V.vehicleID
     WHERE C.customerID = @CustomerID
     AND L.endDate >= @CurrentDate;
100 % -
customerID firstName
                               robert@example.com 555-789-1234 3
                                                                                                                2023-03-10 2025-03-19 Daily
           Robert
                       Johnson
                                                                     Ford
                                                                           Focus 2022 48.00
                                                                                                notAvailable 3
                                                                                                                 2023-06-15 2025-03-19 Monthly
               Robert
                       Johnson
                               robert@example.com 555-789-1234 4
                                                                     Nissan Altima 2023 52.00
                                                                                                available
                               robert@example.com 555-789-1234
                                                                                 2022
                                                                                       48.00
                                                                                                                 2023-09-07 2025-03-19 Daily
```

6. Find all payments made by a customer with a specific phone number.

```
FROM Payment P
JOIN Lease L ON P.leaseID = L.leaseID
JOIN Customer C ON L.customerID = C.customerID
WHERE C.phoneNumber = '555-765-4321';

paymentID leaseID transactionDate amount
1 10 10 2023-10-25 1500.00
```

7. Calculate the average daily rate of all available cars.

```
FROM Vehicle
WHERE status = 'available';

Results Messages

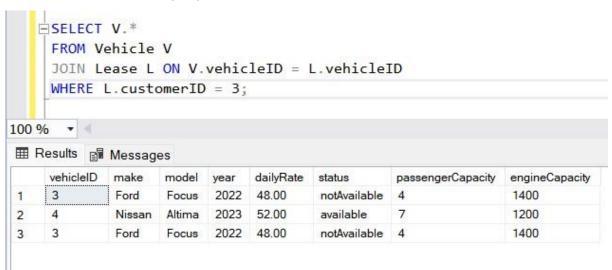
AvgDailyRate
1 53.714285
```

8. Find the car with the highest daily rate.

```
FROM Vehicle
ORDER BY dailyRate DESC;
```



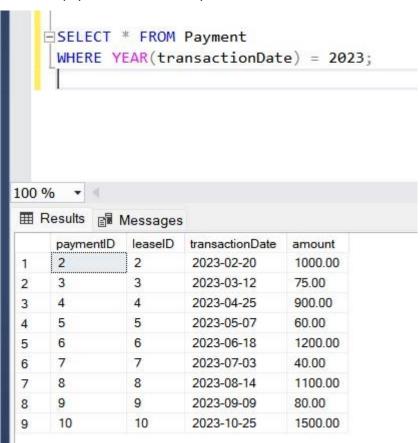
9. Retrieve all cars leased by a specific customer.



10. Find the details of the most recent lease.



11. List all payments made in the year 2023.



12. Retrieve customers who have not made any payments.



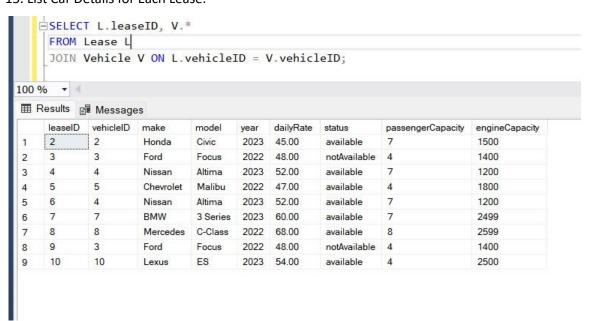
13. Retrieve Car Details and Their Total Payments.

```
⊟SELECT V.vehicleID, V.make, V.model, V.year, V.dailyRate, V.status, V.passengerCapacity, V.engineCapacity,
             SUM(P.amount) AS totalPayments
     FROM Vehicle V
     JOIN Lease L ON V.vehicleID = L.vehicleID
     JOIN Payment P ON L.leaseID = P.leaseID
     GROUP BY V.vehicleID, V.make, V.model, V.year, V.dailyRate, V.status, V.passengerCapacity, V.engineCapacity;
100 % -
■ Results ■ Messages
     vehicleID make
                       model
                                    dailyRate
                                             status
                                                        passengerCapacity
                                                                        engineCapacity
                                                                                     totalPayments
             Honda
                       Civic
                               2023 45.00
                                              available
                                                                        1500
                                                                                     1000.00
2
              Ford
                       Focus
                               2022 48.00
                                              notAvailable
                                                                        1400
                                                                                     155.00
                                              available
3
              Nissan
                       Altima
                               2023 52 00
                                                                        1200
                                                                                     2100 00
4
              Chevrolet
                       Malibu
                               2022 47.00
                                              available
                                                                        1800
                                                                                     60.00
                                              available
              BMW
                       3 Series
                              2023 60.00
                                                                        2499
                                                                                     40.00
6
     8
              Mercedes
                       C-Class
                              2022 68.00
                                              available
                                                                        2599
                                                                                     1100.00
                       ES
                               2023 54.00
                                              available
                                                                        2500
                                                                                     1500.00
```

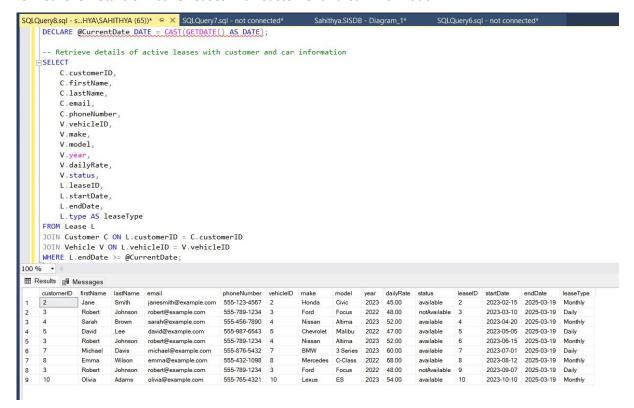
14. Calculate Total Payments for Each Customer.

```
SELECT C.customerID, C.firstName, C.lastName, SUM(P.amount) AS totalPayments
     FROM Customer C
     JOIN Lease L ON C.customerID = L.customerID
     JOIN Payment P ON L.leaseID = P.leaseID
     GROUP BY C.customerID, C.firstName, C.lastName;
100 % -
firstName
     customerID
                      lastName totalPayments
              Jane
                       Smith
                               1000.00
2
     3
              Robert
                       Johnson
                               1355.00
3
              Sarah
                       Brown
                               900.00
              David
                               60.00
4
                       Lee
5
              Michael
                       Davis
                               40.00
6
              Emma
                       Wilson
                               1100.00
                               1500.00
                       Adams
```

15. List Car Details for Each Lease.



16. Retrieve Details of Active Leases with Customer and Car Information.



17. Find the Customer Who Has Spent the Most on Leases.

```
SELECT TOP 1 C.customerID, C.firstName, C.lastName, SUM(P.amount) AS totalSpent
FROM Customer C
JOIN Lease L ON C.customerID = L.customerID
JOIN Payment P ON L.leaseID = P.leaseID
GROUP BY C.customerID, C.firstName, C.lastName
ORDER BY totalSpent DESC;

TOO %

Results Messages

customerID firstName lastName totalSpent
1 10 Olivia Adams 1500.00
```

18. List All Cars with Their Current Lease Information.

