New Wheels Project

Introduction to SQL

Problem Statement

Business Context

A lot of people in the world share a common desire: to own a vehicle. A car or an automobile is seen as an object that gives the freedom of mobility. Many now prefer pre-owned vehicles because they come at an affordable cost, but at the same time, they are also concerned about whether the after-sales service provided by the resale vendors is as good as the care you may get from the actual manufacturers.

New-Wheels, a vehicle resale company, has launched an app with an end-to-end service from listing the vehicle on the platform to shipping it to the customer's location. This app also captures the overall after-sales feedback given by the customer.

Objective

New-Wheels sales have been dipping steadily in the past year, and due to the critical customer feedback and ratings online, there has been a drop in new customers every quarter, which is concerning to the business. The CEO of the company now wants a quarterly report with all the key metrics sent to him so he can assess the health of the business and make the necessary decisions.

As a data analyst, you see that there is an array of questions that are being asked at the leadership level that need to be answered using data. Import the dump file that contains various tables that are present in the database. Use the data to answer the questions posed and create a quarterly business report for the CEO.

Question 1: Find the total number of customers who have placed orders. What is the distribution of the customers across states?
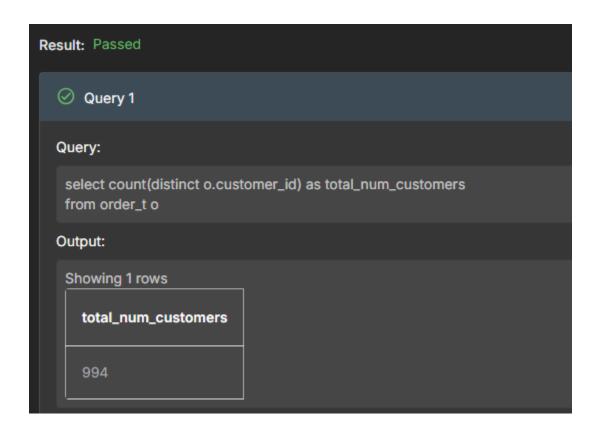
Solution Query:

1.a) Total number of customers placed orders:

select count(distinct o.customer_id) as total_num_customers

from order_t o;

output:

Observations and Insights:

- The query counts the total number of distinct customers from the order_t table.
- The output indicates that there are 994 unique customers in the dataset who have placed orders.

1.b) The Distribution of the customers across states

select c.customer_id,o.order_id,c.state,

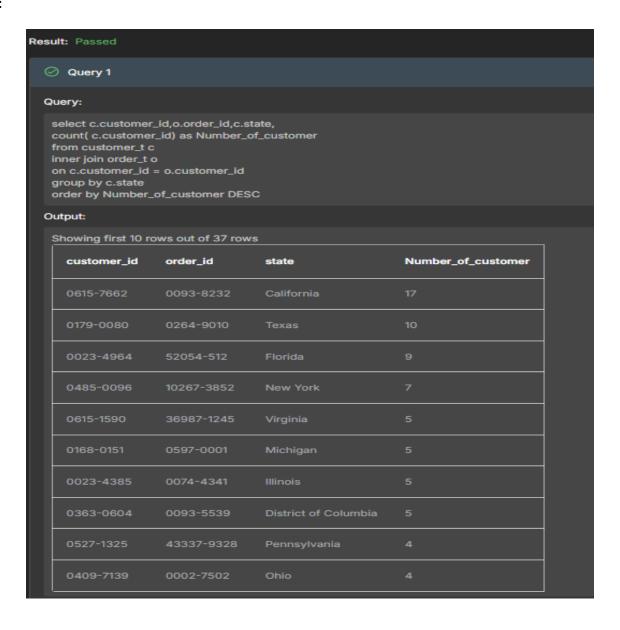count(c.customer_id) as Number_of_customer

from customer_t c

inner join order_t o

on c.customer_id = o.customer_id

group by c.state

order by Number_of_customer DESC;

Output:

Result: Passed

⊘ Query 1

Query:

```
select c.customer_id,o.order_id,c.state,
count( c.customer_id) as Number_of_customer
from customer_t c
inner join order_t o
on c.customer_id = o.customer_id
group by c.state
order by Number_of_customer DESC
```

Output:

Showing first 10 rows out of 37 rows

customer_id	order_id	state	Number_of_customer
0615-7662	0093-8232	California	17
0179-0080	0264-9010	Texas	10
0023-4964	52054-512	Florida	9
0485-0096	10267-3852	New York	7
0615-1590	36987-1245	Virginia	5
0168-0151	0597-0001	Michigan	5
0023-4385	0074-4341	Illinois	5
0363-0604	0093-5539	District of Columbia	5
0527-1325	43337-9328	Pennsylvania	4
0409-7139	0002-7502	Ohio	4

Observations and Insights:

- The query groups the data by state and counts the number of customers (Number_of_customer) in each state based on orders.
- The data shows a clear variation in customer distribution among states.
- **California** has the **highest number of customers (17)**, indicating a strong market presence or larger customer base in the region.
- Other states like **Texas (10)**, **Florida (9)**, and **New York (7)** also show significant customer activity, though they trail behind California.
- States like **Virginia**, **Michigan**, **Illinois**, and others have a smaller number of customers (5 or fewer), suggesting lesser engagement or market penetration in those areas.

Question 2: Which are the top 5 vehicle makers preferred by the customers?

Solution Query:

SELECT p.vehicle_maker,p.product_id,o.order_id,

count(customer_id) as customer_count

from order_t o

inner join product_t p

on o.product_id = p.product_id

group by p.vehicle_maker

ORDER BY

customer_count DESC

LIMIT 5;

Output:

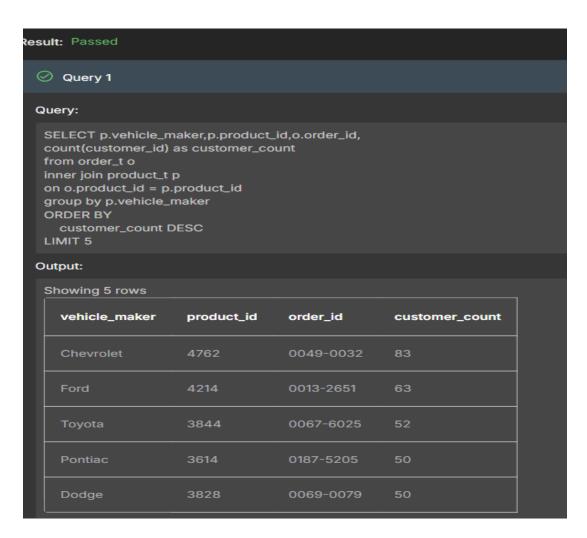**Result:** Passed

⊘ **Query 1**

Query:

```
SELECT p.vehicle_maker,p.product_id,o.order_id,
count(customer_id) as customer_count
from order_t o
inner join product_t p
on o.product_id = p.product_id
group by p.vehicle_maker
ORDER BY
    customer_count DESC
LIMIT 5
```

Output:

Showing 5 rows

vehicle_maker	product_id	order_id	customer_count
Chevrolet	4762	0049-0032	83
Ford	4214	0013-2651	63
Toyota	3844	0067-6025	52
Pontiac	3614	0187-5205	50
Dodge	3828	0069-0079	50

Observations and Insights:

- **Chevrolet, Ford, Toyota, Pontiac, Dodge** are the top 5 vehicle makers preferred by the customers.
- Chevrolet ranks first, with 83 customers.
- Ford follows with 63 customers, and Toyota ranks third with 52 customers.
- Both Pontiac and Dodge have 50 customers each.

Question 3: Which is the most preferred vehicle maker in each state?

Solution Query:

```
 SELECT *

FROM

(

  SELECT

    state,

    vehicle_maker,

    COUNT(c.customer_id) AS total_customers,

   RANK() OVER (PARTITION BY state ORDER BY COUNT(c.customer_id) DESC) AS ranking

   FROM product_t p

   JOIN order_t o

   on  p.product_id = o.product_id

   JOIN customer_t c

   ON o.customer_id = c.customer_id

   GROUP BY 1, 2

) AS preferred_vehicle

WHERE ranking = 1

ORDER BY 3 DESC;
```

Output:

Result: Passed

⊘ **Query 1**

Query:

```
SELECT *
FROM
(
    SELECT
        state,
        vehicle_maker,
        COUNT(c.customer_id) AS total_customers,
    RANK() OVER (PARTITION BY state ORDER BY COUNT(c.customer_id) DESC) AS ranking
    FROM product_t p
    JOIN order_t o
    on  p.product_id = o.product_id
    JOIN customer_t c
    ON o.customer_id = c.customer_id
    GROUP BY 1, 2
) AS preferred_vehicle
WHERE ranking = 1
ORDER BY 3 DESC
```

Output:

Showing first 10 rows out of 101 rows

state	vehicle_maker	total_customers	ranking
California	Pontiac	2	1
California	Nissan	2	1
California	Ford	2	1
California	Chevrolet	2	1
Florida	Volvo	2	1
Florida	Ford	2	1
Indiana	Mazda	2	1
Texas	Nissan	2	1
Alabama	Lincoln	1	1
Alabama	Lexus	1	1

Observations and Insights:

- California: There are four vehicle makers (Pontiac, Nissan, Ford, and Chevrolet) that are tied as the most preferred in California, each with 2 customers.
- This indicates a high level of competition and potentially a wide range of vehicle preferences among customers in California.
- Florida: Similarly, Volvo and Ford both have 2 customers as the most preferred vehicle makers. Like California, this suggests that Florida has multiple options for customers that they prefer, possibly due to availability or brand popularity.
- Texas: In Texas, Nissan leads with 2 customers, showing that there is a preference for Nissan in this state, but there is no mention of other vehicle makers leading. This could indicate lower competition or a strong brand presence for Nissan.
- Indiana: Mazda is the leading vehicle maker with only 2 customers, indicating that Indiana has a niche preference, and Mazda is highly preferred among its relatively small customer base.
- Alabama: Both Lincoln and Lexus lead in Alabama, with just 1 customer each. This reflects a limited preference and potentially lower overall customer volume in the state, suggesting that either fewer customers place orders or the market for vehicle makers is more specialized in this state.
- **The rankings indicate a tied preference for many vehicle makers across states**, which may reflect factors such as brand reputation, regional availability, or customer loyalty.
- **Pontiac, Nissan, Ford, Chevrolet, and Volvo** appear multiple times, suggesting they may be dominant vehicle makers in different states.

Question 4: Find the overall average rating given by the customers. What is the average rating in each quarter?

Consider the following mapping for ratings: "Very Bad": 1, "Bad": 2, "Okay": 3, "Good": 4, "Very Good": 5

Solution Query:

4.a) overall average rating:

 select

 avg(CASE

        WHEN o.customer_feedback = 'Very Bad' THEN 1

        WHEN o.customer_feedback = 'Bad' THEN 2

        WHEN o.customer_feedback = 'Okay' THEN 3

WHEN o.customer_feedback = 'Good' THEN 4

WHEN o.customer_feedback = 'Very Good' THEN 5

ELSE NULL

END

) AS overall_avg_rating

from order_t o;

OUTPUT:

Result: Passed

⊘ **Query 1**

Query:

```
select
 avg(CASE
        WHEN o.customer_feedback = 'Very Bad' THEN 1
        WHEN o.customer_feedback = 'Bad' THEN 2
        WHEN o.customer_feedback = 'Okay' THEN 3
        WHEN o.customer_feedback = 'Good' THEN 4
        WHEN o.customer_feedback = 'Very Good' THEN 5
        ELSE NULL
    END
 ) AS overall_avg_rating
 from order_t o
```

Output:

Showing 1 rows

overall_avg_rating
3.135

Observation:

- The overall average rating given by the customers is 3.135.

4.b) Average rating in each quarter:

```sql
SELECT

quarter_number,

AVG(

  CASE

    WHEN o.customer_feedback = 'Very Bad' THEN 1

    WHEN o.customer_feedback = 'Bad' THEN 2

    WHEN o.customer_feedback = 'Okay' THEN 3

    WHEN o.customer_feedback = 'Good' THEN 4

    WHEN o.customer_feedback = 'Very Good' THEN 5

    ELSE NULL

  END

) AS avg_rating

FROM

  order_t o

GROUP BY quarter_number

ORDER BY

  quarter_number;
```

Output:

Result: Passed
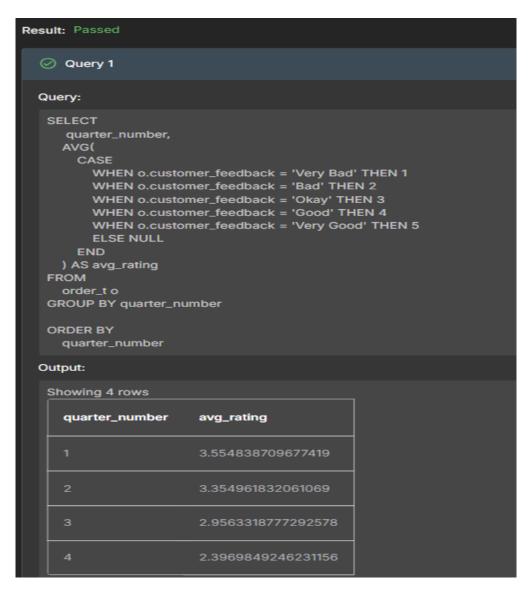
✓ Query 1

Query:

```
SELECT
    quarter_number,
    AVG(
        CASE
            WHEN o.customer_feedback = 'Very Bad' THEN 1
            WHEN o.customer_feedback = 'Bad' THEN 2
            WHEN o.customer_feedback = 'Okay' THEN 3
            WHEN o.customer_feedback = 'Good' THEN 4
            WHEN o.customer_feedback = 'Very Good' THEN 5
            ELSE NULL
        END
    ) AS avg_rating
FROM
    order_t o
GROUP BY quarter_number

ORDER BY
    quarter_number
```

Output:

Showing 4 rows

quarter_number	avg_rating
1	3.554838709677419
2	3.354961832061069
3	2.9563318777292578
4	2.3969849246231156

Observations and Insights:

- This output shows the **Decreasing Trend in Average Rating**.
- **Q1 (3.55)**: The highest average rating.
- **Q2 (3.35)**: Slight decline compared to Q1.
- **Q3 (2.96)**: Significant drop from Q2.
- **Q4 (2.40)**: The lowest average rating, indicating worsening customer feedback.
- The consistent decline in average ratings across quarters may indicate a decline in customer satisfaction.

Solution Query:

```
SELECT

  quarter_number,

  COUNT(o.customer_feedback) AS total_feedback,

  ROUND(

    100.0 * SUM(CASE WHEN o.customer_feedback = 'Very Bad' THEN 1 ELSE 0 END) /
COUNT(o.customer_feedback), 2

  ) AS percent_very_bad,

  ROUND(

    100.0 * SUM(CASE WHEN o.customer_feedback = 'Bad' THEN 1 ELSE 0 END) /
COUNT(o.customer_feedback), 2

  ) AS percent_bad,

  ROUND(

    100.0 * SUM(CASE WHEN o.customer_feedback = 'Okay' THEN 1 ELSE 0 END) /
COUNT(o.customer_feedback), 2

  ) AS percent_okay,

  ROUND(

    100.0 * SUM(CASE WHEN o.customer_feedback = 'Good' THEN 1 ELSE 0 END) /
COUNT(o.customer_feedback), 2

  ) AS percent_good,

  ROUND(

    100.0 * SUM(CASE WHEN o.customer_feedback = 'Very Good' THEN 1 ELSE 0 END) /
COUNT(o.customer_feedback), 2

  ) AS percent_very_good

FROM

  order_t o
```

GROUP BY

quarter_number

ORDER BY

quarter_number;

Output:

```
Result: Passed

⊘  Query 1

Query:

SELECT
    quarter_number,
    COUNT(o.customer_feedback) AS total_feedback,
    ROUND(
      100.0 * SUM(CASE WHEN o.customer_feedback = 'Very Bad' THEN 1 ELSE 0 END) / COUNT(o.customer_feedback), 2
    ) AS percent_very_bad,
    ROUND(
      100.0 * SUM(CASE WHEN o.customer_feedback = 'Bad' THEN 1 ELSE 0 END) / COUNT(o.customer_feedback), 2
    ) AS percent_bad,
    ROUND(
      100.0 * SUM(CASE WHEN o.customer_feedback = 'Okay' THEN 1 ELSE 0 END) / COUNT(o.customer_feedback), 2
    ) AS percent_okay,
    ROUND(
      100.0 * SUM(CASE WHEN o.customer_feedback = 'Good' THEN 1 ELSE 0 END) / COUNT(o.customer_feedback), 2
    ) AS percent_good,
    ROUND(
      100.0 * SUM(CASE WHEN o.customer_feedback = 'Very Good' THEN 1 ELSE 0 END) / COUNT(o.customer_feedback), 2
    ) AS percent_very_good
FROM
    order_t o
GROUP BY
    quarter_number
ORDER BY
    quarter_number
```
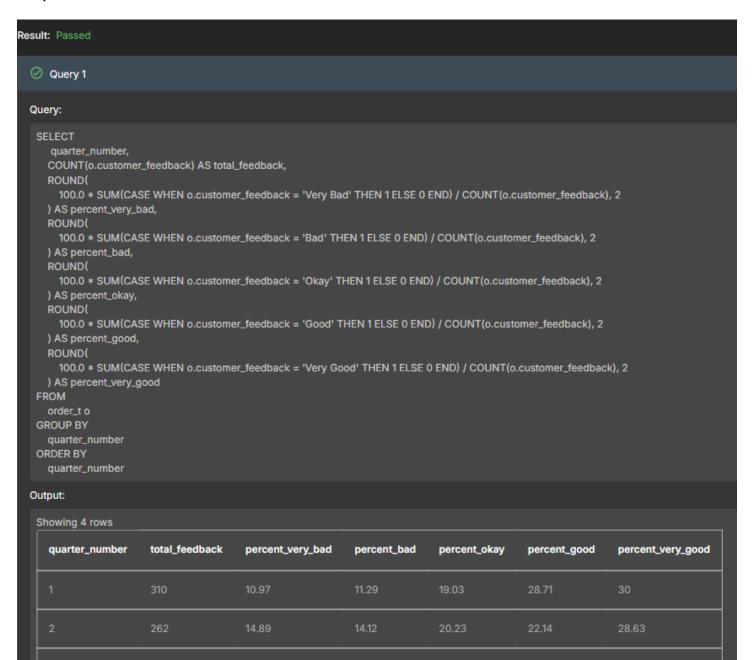
Output:

Showing 4 rows

quarter_number	total_feedback	percent_very_bad	percent_bad	percent_okay	percent_good	percent_very_good
1	310	10.97	11.29	19.03	28.71	30
2	262	14.89	14.12	20.23	22.14	28.63
3	229	17.9	22.71	21.83	20.96	16.59
4	199	30.65	29.15	20.1	10.05	10.05

Observations and Insights:

- The query calculates the total feedback count and the percentage distribution of customer feedback across different ratings: **Very Bad**, **Bad**, **Okay**, **Good**, and **Very Good**, grouped by quarter_number.
- As we move from Quarter 1 to Quarter 4:
- **Very Bad Feedback** percentage increases significantly, from **10.97% in Q1** to **30.65% in Q4**.
- **Bad Feedback** also sees a steady increase from **11.29% in Q1** to **29.15% in Q4**.
- **Okay Feedback** shows a declining trend, starting at **19.03% in Q1** and dropping to **20.1% in Q4**.
- **Good Feedback** declines significantly, from **28.71% in Q1** to **10.05% in Q4**.
- **Very Good Feedback** also decreases notably, from **30% in Q1** to **10.05% in Q4**.
- The total feedback count decreases progressively, from **310 in Q1** to **199 in Q4**.
- The steep increase in **negative feedback** (Very Bad and Bad) and the drop in **positive feedback** (Good and Very Good) indicate a significant decline in customer satisfaction over the quarters.

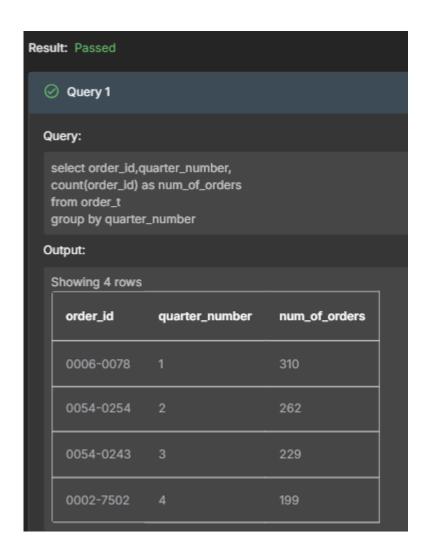**Yes, customers are getting more dissatisfied over time.**

Question 6: What is the trend of the number of orders by quarter?

Solution Query:

```
select order_id,quarter_number,

count(order_id) as num_of_orders

from order_t

group by quarter_number;
```

Result: Passed

⊘ **Query 1**

Query:

```
select order_id,quarter_number,
count(order_id) as num_of_orders
from order_t
group by quarter_number
```

Output:

Showing 4 rows

order_id	quarter_number	num_of_orders
0006-0078	1	310
0054-0254	2	262
0054-0243	3	229
0002-7502	4	199

Observations and Insights:

- The number of orders steadily declines across the quarters:
- **Q1**: 310 orders
- **Q2**: 262 orders
- **Q3**: 229 orders
- **Q4**: 199 orders
- The rate of decline is consistent from one quarter to next quarter.
- The gradual reduction in the number of orders suggests a potential decline in customer interest or engagement over the quarters.
- This could be related to a decrease in customer satisfaction as observed in the feedback analysis.

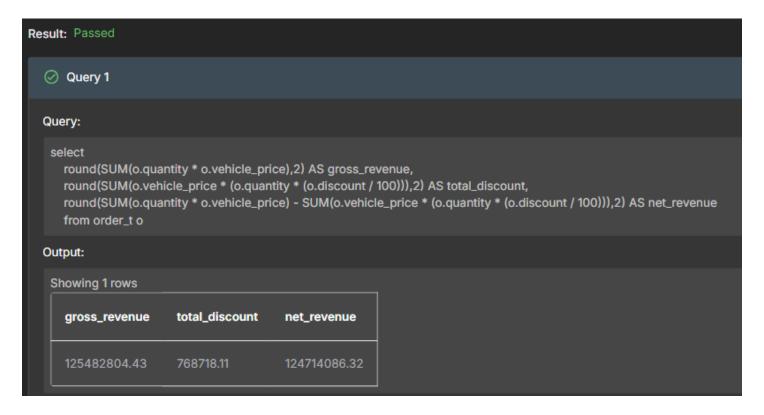**Solution Query:**

7.a) The net revenue generated by the company:

select

   round(SUM(o.quantity * o.vehicle_price),2) AS gross_revenue,

   round(SUM(o.vehicle_price * (o.quantity * (o.discount / 100))),2) AS total_discount,

   round(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))),2) AS net_revenue

   from order_t o;

Output:

Result: Passed

Query 1

Query:

```
select
   round(SUM(o.quantity * o.vehicle_price),2) AS gross_revenue,
   round(SUM(o.vehicle_price * (o.quantity * (o.discount / 100))),2) AS total_discount,
   round(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))),2) AS net_revenue
   from order_t o
```

Output:

Showing 1 rows

gross_revenue	total_discount	net_revenue
125482804.43	768718.11	124714086.32

Observations and Insights:

- A net revenue of **124.71 million** after a minimal discount amounting to **768.71k** indicates the company retains a significant portion of its potential revenue.

7.b) The quarter-over-quarter % change in net revenue:

```
SELECT
  o. quarter_number,
  SUM(o.quantity * o.vehicle_price) AS gross_revenue,
  SUM(o.vehicle_price * (o.quantity * (o.discount / 100))) AS total_discount,
  SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))) AS net_revenue,
  ROUND(
    100.0 * (
      SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100)))
      - LAG(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))))
        OVER (ORDER BY o. quarter_number)
    ) / LAG(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))))
      OVER (ORDER BY o. quarter_number), 2
  ) AS qoq_change
FROM
  order_t o
GROUP BY
  o.quarter_number
ORDER BY
  o.quarter_number;
```

output:

Result: Passed

⊘ **Query 1**

Query:

```
SELECT
   o. quarter_number,
   SUM(o.quantity * o.vehicle_price) AS gross_revenue,
   SUM(o.vehicle_price * (o.quantity * (o.discount / 100))) AS total_discount,
   SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))) AS net_revenue,
   ROUND(
      100.0 * (
         SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100)))
         - LAG(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))))
            OVER (ORDER BY o. quarter_number)
      ) / LAG(SUM(o.quantity * o.vehicle_price) - SUM(o.vehicle_price * (o.quantity * (o.discount / 100))))
         OVER (ORDER BY o. quarter_number), 2
   ) AS qoq_change
FROM
   order_t o
GROUP BY
   o.quarter_number
ORDER BY
   o.quarter_number
```

Output:

Showing 4 rows

quarter_number	gross_revenue	total_discount	net_revenue	qoq_change
1	39637630.97	216050.8107039999	39421580.159296	
2	32913737.76	197907.42003800007	32715830.339962002	-17.01
3	29435427.479999986	205531.28635099987	29229896.193648987	-10.66
4	23496008.219999995	149228.5893940001	23346779.630605996	-20.13

Insight and observation:

Quarter-over-Quarter (QoQ) % Change in Net Revenue:

- **Q2 vs Q1**: The net revenue decreased by **17.01%**.
- **Q3 vs Q2**: The net revenue decreased by **10.66%**.
- **Q4 vs Q3**: The net revenue decreased by **20.13%**.
- Net revenue has consistently decreased across all quarters.
- The most significant drop occurred in **Q4**, with a decline of **20.13%** compared to the previous quarter.
- There is a consistent downward trend in net revenue. This indicates potential issues such as declining sales, increasing competition, or inefficiencies in business operations.

Question 8: What is the trend of net revenue and orders by quarters?

Solution Query:

select quarter_number,

SUM(quantity * vehicle_price) AS gross_revenue,

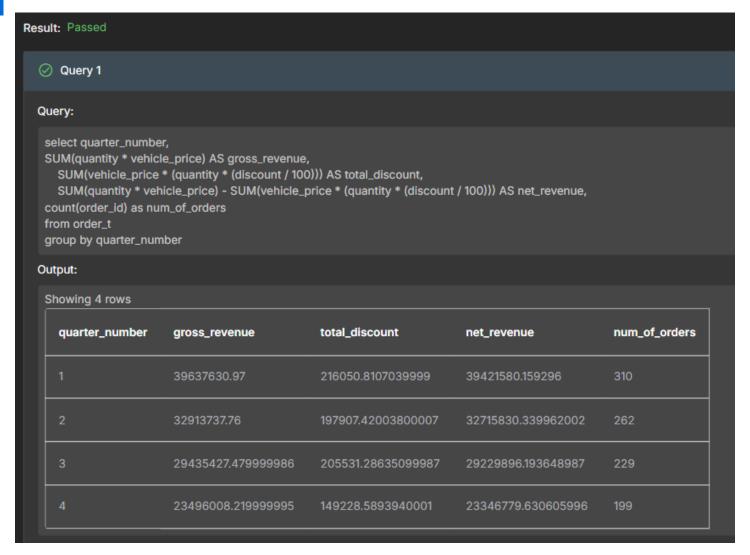   SUM(vehicle_price * (quantity * (discount / 100))) AS total_discount,

   SUM(quantity * vehicle_price) - SUM(vehicle_price * (quantity * (discount / 100))) AS net_revenue,

count(order_id) as num_of_orders

from order_t

group by quarter_number;

Result: Passed

⊘ **Query 1**

Query:

```
select quarter_number,
SUM(quantity * vehicle_price) AS gross_revenue,
    SUM(vehicle_price * (quantity * (discount / 100))) AS total_discount,
    SUM(quantity * vehicle_price) - SUM(vehicle_price * (quantity * (discount / 100))) AS net_revenue,
count(order_id) as num_of_orders
from order_t
group by quarter_number
```

Output:

Showing 4 rows

quarter_number	gross_revenue	total_discount	net_revenue	num_of_orders
1	39637630.97	216050.8107039999	39421580.159296	310
2	32913737.76	197907.42003800007	32715830.339962002	262
3	29435427.479999986	205531.28635099987	29229896.193648987	229
4	23496008.219999995	149228.5893940001	23346779.630605996	199

Observations and Insights:

- Net revenue shows a **consistent decline** each quarter, with the steepest drop in Q4.
- The number of orders also exhibits a **consistent decline** across all quarters, with a relatively smaller but steady reduction.
- The decline in **net revenue** aligns closely with the drop in the **number of orders**, indicating fewer transactions as the primary driver of revenue decline.
- Both net revenue and the number of orders experienced their steepest declines in Q4, suggesting potential seasonal factors or business performance challenges during this period.

Solution Query:

select c.customer_id,o.order_id,c.credit_card_type,

round(AVG(o.discount), 2) as Average_discount

from customer_t c

inner join order_t o

on c.customer_id = o.customer_id

group by c.credit_card_type

order by 4 desc;

Output:

Result: Passed

✓ Query 1

Query:

```
select c.customer_id,o.order_id,c.credit_card_type,
round(AVG(o.discount), 2) as Average_discount
from customer_t c
inner join order_t o
on c.customer_id = o.customer_id
group by c.credit_card_type
order by 4 desc
```

Output:

Showing first 10 rows out of 16 rows

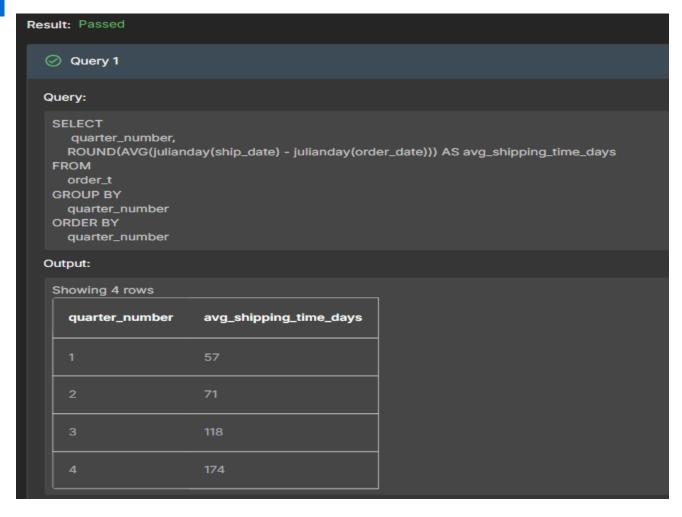| customer_id	order_id	credit_card_type	Average_discount
0172-3762	0363-0563	instapayment	0.77
0338-0520	49884-310	solo	0.7
0363-0604	0093-5539	americanexpress	0.68
0179-0080	0264-9010	diners-club-enroute	0.67
0065-0643	0462-0395	mastercard	0.65
0378-3005	0270-1314	diners-club-carte-blan...	0.65
0378-5504	0093-0248	visa-electron	0.64
0006-0740	16590-774	maestro	0.64
0023-4385	0074-4341	laser	0.62
0555-0140	43353-914	china-unionpay	0.62

Observations and Insights:

- **Instapayment** leads with the highest average discount (0.77), possibly indicating targeted promotions or rewards for this card type.
- Cards like **Solo, American Express**, and **Diners Club Enroute** receive significant discounts (above 0.67), suggesting a focus on incentivizing transactions from high-value customer segments.
- Cards such as **Mastercard, Visa Electron**, and **Maestro** have a consistent average discount around 0.64-0.65, indicating similar treatment for mainstream payment methods.
- Cards like **Laser** and **China UnionPay** receive the lowest discounts (0.62), possibly reflecting a lower priority for promotions targeting these card types.

Question 10: What is the average time taken to ship the placed orders for each quarter?

Solution Query:

SELECT

  quarter_number,

  ROUND(AVG(julianday(ship_date) - julianday(order_date))) AS avg_shipping_time_days

FROM

  order_t

GROUP BY

  quarter_number

ORDER BY

  quarter_number;

Output:

Result: Passed

⊘ **Query 1**

Query:

```
SELECT
    quarter_number,
    ROUND(AVG(julianday(ship_date) - julianday(order_date))) AS avg_shipping_time_days
FROM
    order_t
GROUP BY
    quarter_number
ORDER BY
    quarter_number
```

Output:

Showing 4 rows

quarter_number	avg_shipping_time_days
1	57
2	71
3	118
4	174

Insights and observation:
- **Q1** had the least average shipping time of 57 days comparatively
- The average shipping time increased significantly each quarter, with the highest jump occurring in **Q3**. This suggests a growing delay in the fulfillment process.
- **Q4** had the highest average shipping time of **174 days**, nearly **3x the time in Q1**. This could indicate inefficiencies or capacity issues during the later months.
- As shipping delays increase, they may negatively impact customer satisfaction and loyalty, contributing to declining orders and revenue observed previously.

Business Metrics Overview

Total Revenue	Total Orders	Total Customers	Average Rating
124714086.32	1000	994	3.135
Last Quarter Revenue	**Last quarter Orders**	**Average Days to Ship**	**% Good Feedback**
23346779.630605996	199	98	21.5

Business Recommendations

- Address increasing delays by improving logistics, automating fulfillment, and offering expedited shipping options.
- Implement loyalty programs, personalized offers, and targeted campaigns to re-engage existing customers and drive repeat purchases.
- Offer discounts or promotions in states with fewer preferred brands (e.g., **Alabama**, **Indiana**).
- Promote brands in states like **California** and **Florida**, where brands like **Pontiac** and **Nissan** are popular.
- Focus on high-performing payment methods, align discounts with revenue impact, and introduce tiered incentives to maximize profitability.
- Ensure adequate inventory, launch targeted Q4 promotions, and proactively manage supply chain challenges.
- Monitor key performance metrics, segment customers effectively, and use predictive analytics to forecast demand and refine strategies.
- Investigate and resolve product issues impacting satisfaction.
- Establish continuous feedback loops from customers to product teams.
- Increase staffing and resources in Q3 and Q4 to handle demand surges.
- Use predictive analytics to forecast and prepare for high-demand periods.
- Be transparent with customers about service improvements.
- Engage dissatisfied customers with personalized recovery actions.
- Conduct quarterly reviews to track customer feedback trends.
- Implement real-time dashboards for immediate performance insights.
- Stay updated on customer preferences and change strategies accordingly.