



Strategic and In-depth Analysis



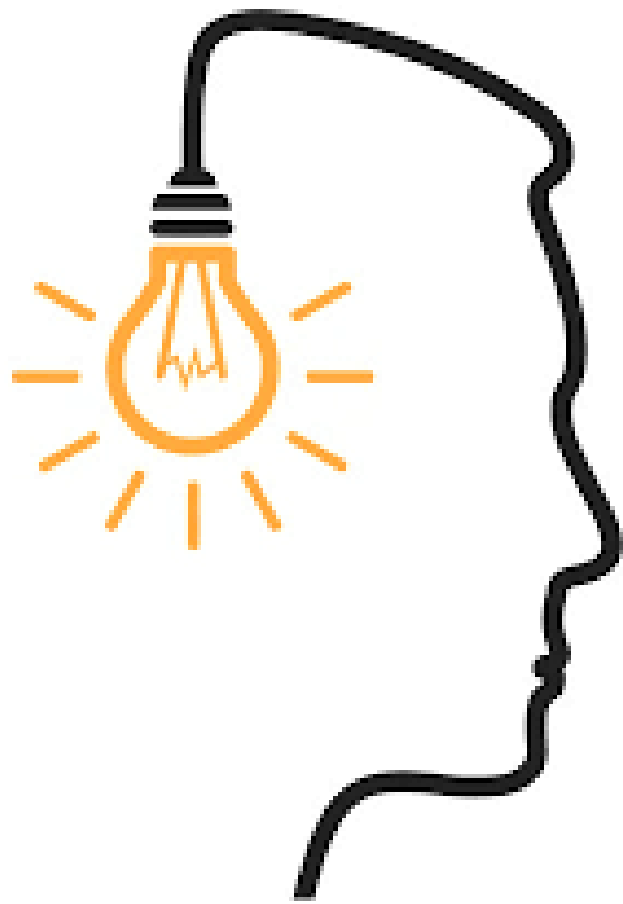
Presented By Pankaj Kumar





Problem Statement

Swiggy, a leading food delivery platform, seeks to enhance its business operations and customer satisfaction by gaining deeper insights from its extensive SQL dataset. The objective is to leverage sophisticated SQL queries and intricate joins to perform in-depth analysis that will support strategic decision-making. The insights sought include understanding customer demographics, restaurant performance, order patterns, and delivery efficiency



Methodology Used in the Analysis



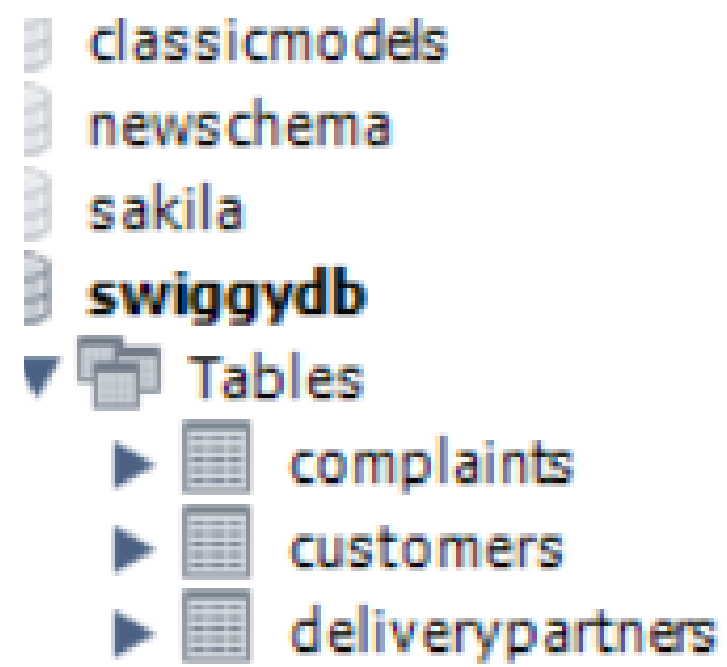
Data Source: Swiggy's Internal sales Database.

Tool: MySQL for Querying data from Database



Problem: Display all customers who live in 'Delhi'.

MySQL Query for Above problem:

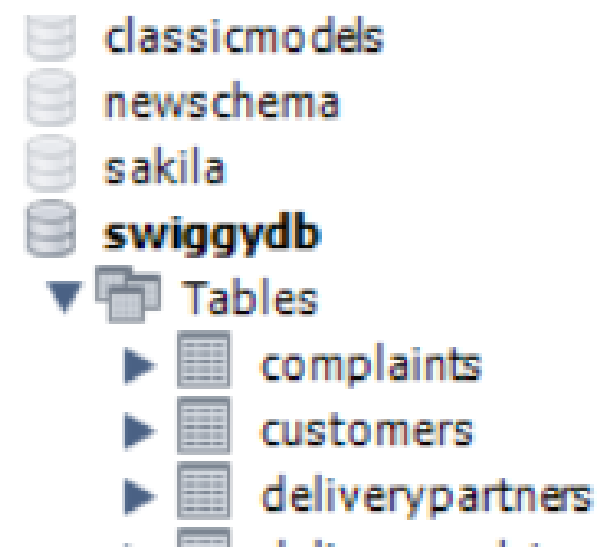


```
3 • SELECT
4     name
5 FROM
6     customers
7 WHERE
8     city = 'Delhi';
```



Problem: Find the average rating of all restaurants in 'Mumbai'

MySQL Query for Above problem:

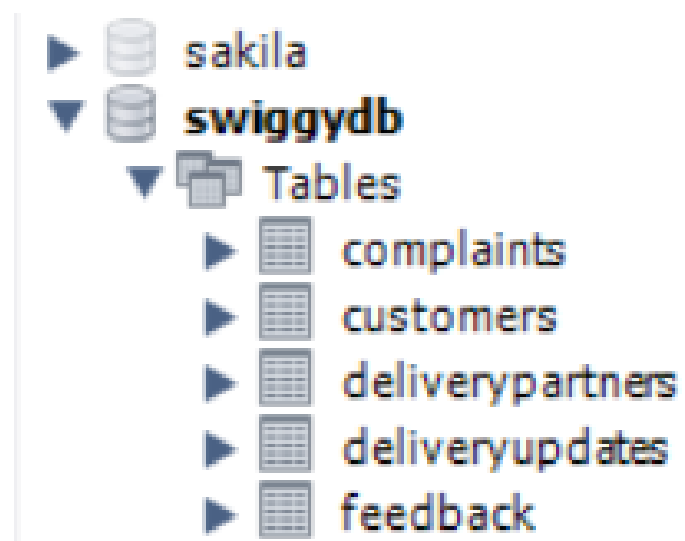


```
3 • SELECT
4     ROUND(AVG(rating), 2) AS average_rating
5 FROM
6     restaurants
7 WHERE
8     city = 'Mumbai';
```



Problem: List all customers who have placed at least one order.

MySQL Query for Above problem:

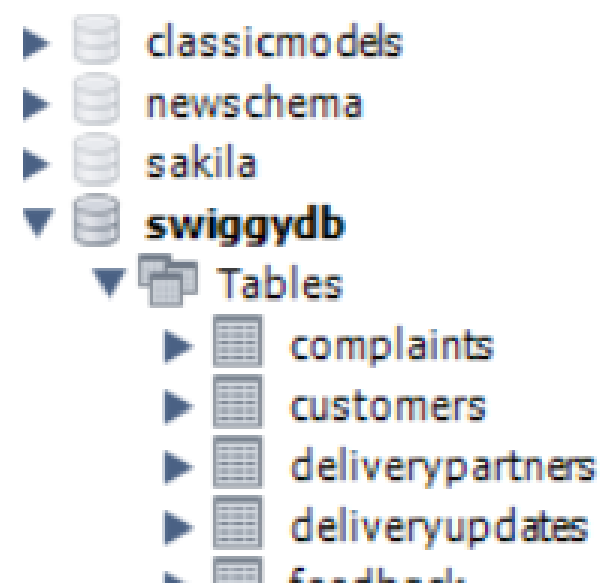


```
13 • SELECT DISTINCT
14     customers.name
15 FROM
16     customers
17     INNER JOIN
18     orders ON customers.customer_id = orders.customer_id;
```



Problem: Display the total number of **orders** placed by each **customer**.

MySql Query for Above problem:

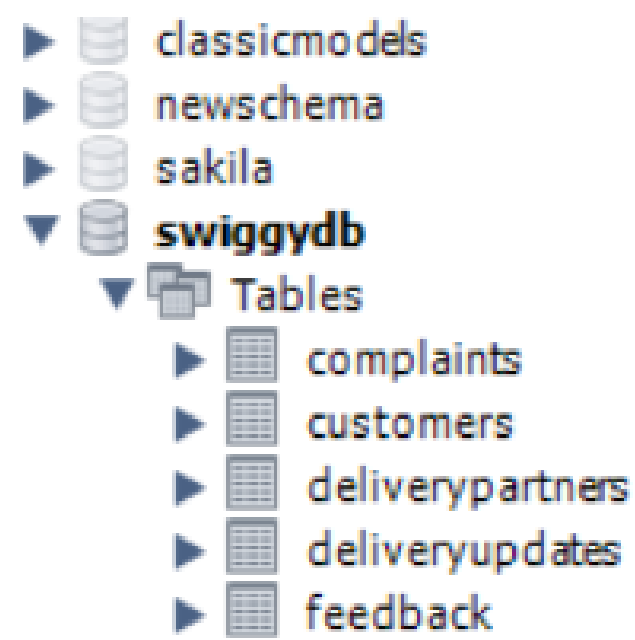


```
33 • SELECT
34     customers.name, COUNT(orders.order_id)
35 FROM
36     customers
37     LEFT JOIN
38     orders ON customers.customer_id = orders.customer_id
39 GROUP BY customers.name;
```



Problem: Find the **total revenue** generated by each restaurant

MySQL Query for Above problem:

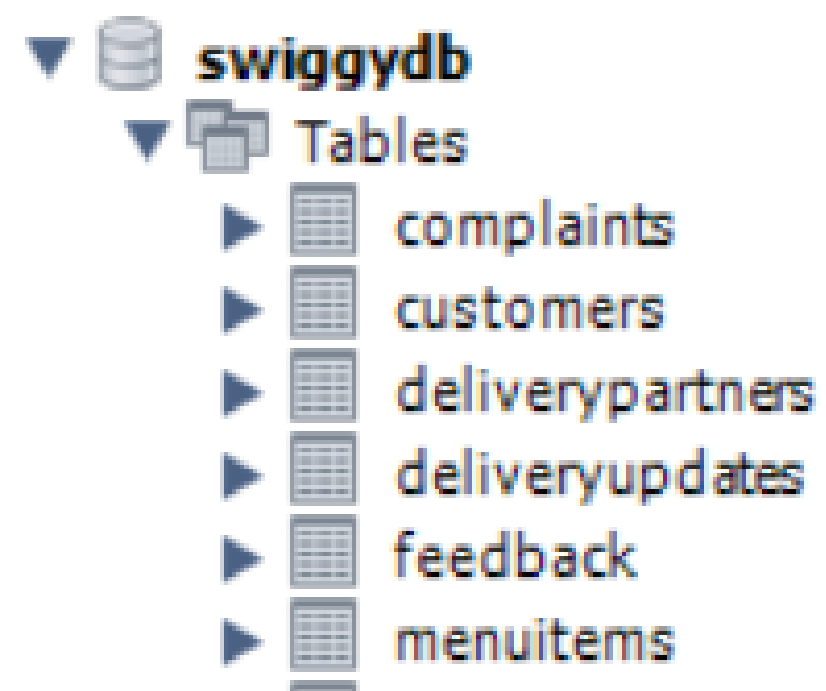


```
11 • SELECT
12     restaurants.name, SUM(orders.total_amount) AS total_revenue
13 FROM
14     restaurants
15     LEFT JOIN
16     orders ON restaurants.restaurant_id = orders.restaurant_id
17 GROUP BY restaurants.name;
```



Problem: Find the top 5 restaurants with the highest average rating.

MySQL Query for Above problem:

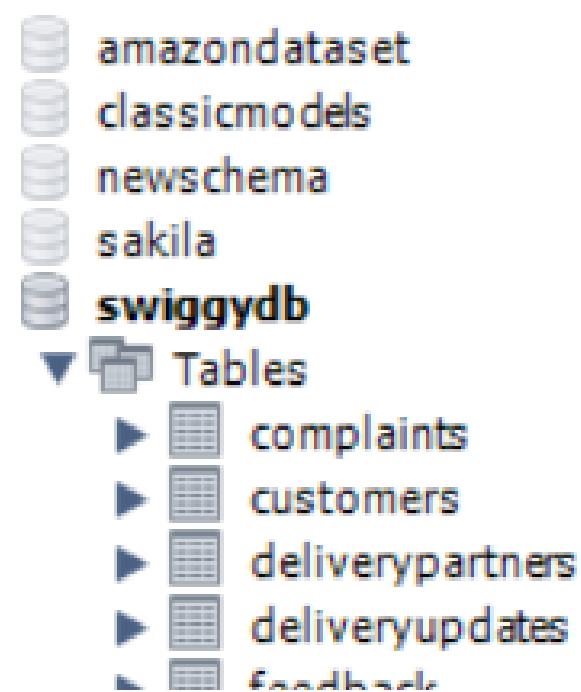


```
21 • SELECT
22     name, rating
23 FROM
24     restaurants
25 ORDER BY rating DESC
26 LIMIT 5;
```



Problem: Display all **customers** who have never placed an order

MySQL Query for Above problem:

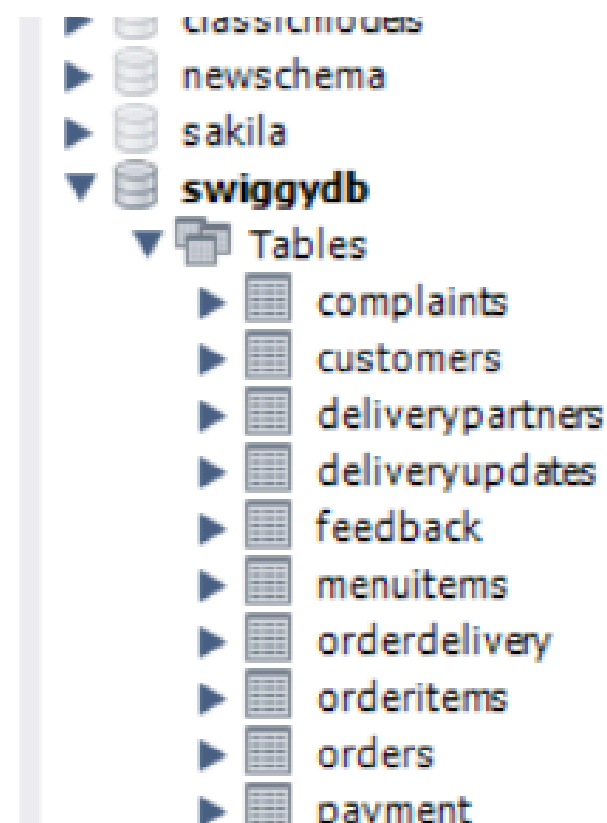


```
41 • SELECT DISTINCT
42     customers.name
43 FROM
44     customers
45     LEFT JOIN
46     orders ON customers.customer_id = orders.order_id
47 WHERE
48     orders.order_id IS NULL;
```



Problem: Find the number of orders placed by each customer in 'Mumbai'.

MySql Query for Above problem:



```
21 • SELECT
22     customers.name,
23     customers.city,
24     COUNT(orders.order_id) AS numberoforders
25 FROM
26     customers
27     LEFT JOIN
28     orders ON customers.customer_id = orders.customer_id
29 WHERE
30     city = 'Mumbai'
31 GROUP BY customers.name , customers.city;
```



Problem: Display all orders placed in the last 30 days.

MySQL Query for Above problem:

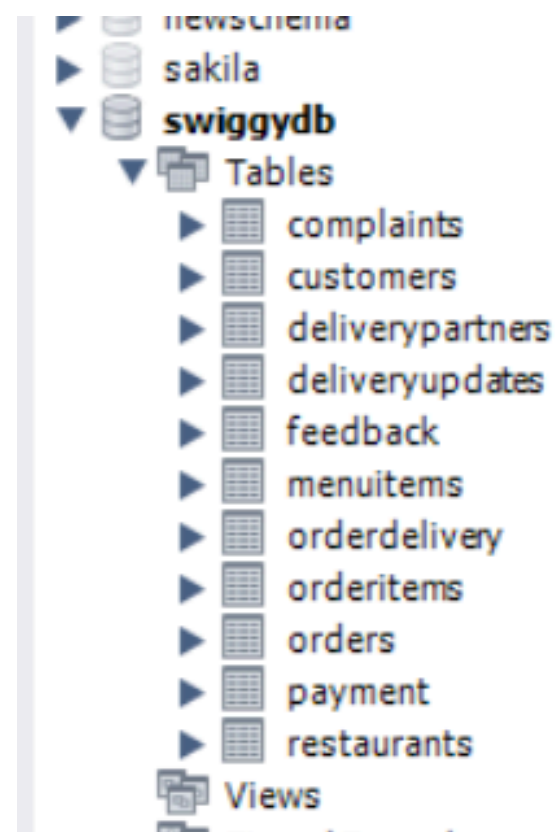


```
8 • SELECT
9      *
10     FROM
11      orders
12     WHERE
13      order_date >= DATE_SUB(NOW(), INTERVAL 30 DAY);
```



Problem: List all **delivery partners** who have completed more than 1 delivery

MySQL Query for Above problem:

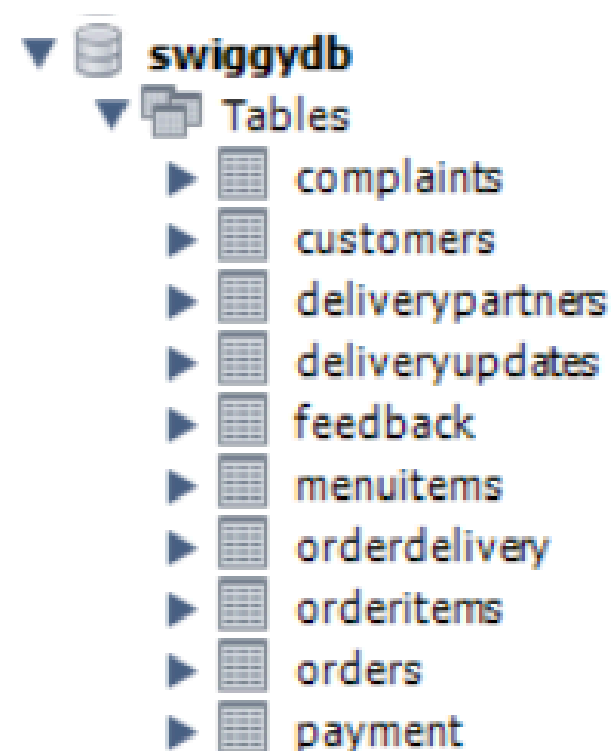


```
4 • SELECT
5     deliverypartners.name, COUNT(orderdelivery.order_id)
6 FROM
7     deliverypartners
8     INNER JOIN
9     orderdelivery ON deliverypartners.partner_id = orderdelivery.partner_id
10    INNER JOIN
11    deliveryupdates ON deliveryupdates.order_id = orderdelivery.order_id
12 WHERE
13     deliveryupdates.status != 'Failed'
14 GROUP BY deliverypartners.name
15 HAVING COUNT(orderdelivery.order_id) > 1;
```



Problem: Find the **customers** who have placed orders on exactly **three different days**.

MySql Query for Above problem:




```
50 • SELECT
51     customers.name,
52     COUNT(DISTINCT orders.order_date) AS numofOrder_placed
53 FROM
54     customers
55     INNER JOIN
56     orders ON customers.customer_id = orders.customer_id
57 GROUP BY customers.name
58 HAVING COUNT(DISTINCT orders.order_date) = 3;
```



Problem: Find the delivery partner who has worked with the most different customers

MySQL Query for Above problem:

A database schema tree for 'swiggydb'. It shows a hierarchy with 'newschema', 'sakila', and 'swiggydb'. Under 'swiggydb', there are 'Tables' and 'Views'. The 'Tables' section lists: complaints, customers, deliverypartners, deliveryupdates, feedback, menuitems, orderdelivery, orderitems, orders, payment, and restaurants. The 'Views' section is empty. Below 'Views' are 'Stored Procedures' and 'Functions', both of which are also empty.

```
4 • SELECT
5     deliverypartners.name,
6     deliverypartners.partner_id,
7     COUNT(DISTINCT orders.customer_id)
8 FROM
9     deliverypartners
10    INNER JOIN
11    orderdelivery ON deliverypartners.partner_id = orderdelivery.partner_id
12    INNER JOIN
13    orders ON orders.order_id = orderdelivery.order_id
14 GROUP BY deliverypartners.name , deliverypartners.partner_id
15 ORDER BY COUNT(DISTINCT orders.customer_id) DESC
16 LIMIT 1;
```



Problem: Identify customers who have the **same city** and have placed orders at the **same restaurants**, but on **different dates**.

MySQL Query for Above problem:



```
SELECT DISTINCT c1.name AS customer1, c2.name AS customer2, c1.city, o1.restaurant_id, r.name,  
DATE(o1.order_date) AS order_date1, DATE(o2.order_date) AS order_date2 FROM customers c1 JOIN orders o1  
ON c1.customer_id = o1.customer_id JOIN customers c2 ON c1.city = c2.city JOIN orders o2 ON c2.customer_id = o2.customer_id  
JOIN restaurants r ON r.restaurant_id = o1.restaurant_id WHERE o1.restaurant_id = o2.restaurant_id  
AND DATE(o1.order_date) <> DATE(o2.order_date) AND c1.customer_id < c2.customer_id  
ORDER BY c1.city , o1.restaurant_id , order_date1;
```





Conclusion

By using sophisticated SQL queries and joins, Swiggy can gain valuable insights into customer demographics, restaurant performance, order patterns, and delivery efficiency. These insights will enable data-driven decision-making, helping to improve customer satisfaction, optimize operations, and drive business growth.





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