



# *Advance MySQL for Strategic Insights at Swiggy*

**Presented by**  
**N.Hari Krishna**



# Overview



*Introduction*



*Analysis*



*Conclusion*

# Introduction

- **Swiggy is a leading food delivery platform in India, connecting customers with a wide range of restaurants. By using data analytics, Swiggy enhances its service, optimizing delivery and customer experience.**
- **This SQL project focuses on analyzing Swiggy's data to uncover insights about customer behavior, restaurant performance, and delivery efficiency. Using advanced queries, the goal is to support better decision-making for Swiggy's operations.**



- Display all customers who live in 'Delhi'.

```
1
2 • select * from customers where city = "delhi";
3
4
```

customer_id	name	email	phone_number	city	address
2	Rohini Verma	rohini.verma@yahoo.com	9823456789	Delhi	B-23, Saket
5	Manish Kumar	NULL	9834567890	Delhi	D-45, Lajpat Nagar
18	Sonali Mishra	NULL	9878345678	Delhi	N-54, Karol Bagh
NULL	NULL	NULL	NULL	NULL	NULL

## Customer Location Analysis (Delhi Residents):

**Understanding the distribution of customers by location helps Swiggy tailor its marketing strategies. By identifying a significant customer base in Delhi, Swiggy can focus on region-specific promotions and optimize delivery services in the area to enhance customer satisfaction.**



- Find the average rating of all restaurants in 'Mumbai'.

```
Limit to 1000 rows | select city,avg(rating) from restaurants  
where city = "mumbai" group by city;
```

Result Grid		
	city	avg(rating)
▶	Mumbai	4.300000

## Restaurant Rating Analysis (Mumbai):

Calculating the average rating of restaurants in Mumbai helps Swiggy assess the overall quality of its restaurant partners in that region. This analysis enables Swiggy to identify potential areas for improvement, prioritize high-rated restaurants in recommendations, and enhance the overall customer experience.



- List all customers who have placed at least one order.

```
1 • select distinct customers.name  
2   from customers inner join orders  
3     on customers.customer_id = orders.customer_id;  
4
```

Result Grid	
	name
▶	Amit Sharma
	Rohini Verma
	Rajesh Gupta
	Sneha Mehta
	Manish Kumar
	Priya Singh

## Active Customer Identification:

Identifying customers who have placed at least one order helps Swiggy recognize active users. This information is crucial for customer engagement, allowing Swiggy to target active customers with personalized offers and re-engage those who may have lapsed.



- Display the total number of orders placed by each customer.

```
• select customers.name, count(orders.order_id) as total_order  
from customers left join orders  
on customers.customer_id = orders.customer_id  
group by customers.name
```

	name	total_orders
▶	Amit Sharma	2
	Rohini Verma	3
	Rajesh Gupta	3
	Sneha Mehta	2
	Manish Kumar	4
	Priya Singh	3

## Customer Order Frequency Analysis:

**Tracking the total number of orders placed by each customer provides insights into customer loyalty and engagement. Swiggy can use this data to reward frequent customers with loyalty programs and better understand customer retention trends.**



- Find the total revenue generated by each restaurant.

```
1 • select restaurants.name,sum(orders.total_amount)
2   from restaurants left join orders
3   on orders.restaurant_id = restaurants.restaurant_id
4   group by restaurants.name;
```

	name	sum(orders.total_amount)
▶	Spice of India	1100.00
	Tandoori Flames	1200.00
	Biryani House	5300.00
	Curry Pot	3200.00
	Taste of Punjab	600.00
	Royal Biryani	650.00

## Restaurant Revenue Analysis:

Analyzing the total revenue generated by each restaurant helps Swiggy identify its top-performing partners. This information is valuable for building stronger partnerships, negotiating better deals, and ensuring that high-revenue restaurants receive priority support.



- Find the top 5 restaurants with the highest average rating.

```
1 • select name, rating from restaurants  
2 order by rating desc limit 5;
```

	name	rating
▶	Biryani House	4.80
	Paradise Biryani	4.80
	Lucknowi Nawabi	4.70
	Royal Biryani	4.70
	Flavours of Bengal	4.60

## Top Restaurant Identification:

Identifying the top 5 restaurants with the highest average ratings helps Swiggy highlight and promote these establishments. This boosts visibility for high-quality restaurants, enhancing customer satisfaction and driving more orders to these top performers.



- Display all customers who have never placed an order.

```
1 • select distinct customers.name from  
2   customers left join orders  
3   on customers.customer_id = orders.customer_id  
4   where orders.order_id is null;
```

	name
▶	Sonal Kaur
	Vivek Malhotra
	Divya Iyer
	Rakesh Yadav
	Mona Sharma
	Sudha Pillai

## Inactive Customer Identification:

Recognizing customers who have never placed an order allows Swiggy to understand potential barriers to conversion. Swiggy can use this data to design targeted campaigns aimed at converting these users into active customers.



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

```
2 • select customers.name, count(orders.order_id)
3   from customers left join orders
4   on customers.customer_id = orders.customer_id
5   where customers.city = "mumbai"
6   group by customers.name ;
```

	name	count(orders.order_id)
▶	Amit Sharma	2
▶	Rajesh Gupta	3
▶	Arjun Desai	2
▶	Ravi Singh	2

## Customer Order Behavior in Mumbai:

Analyzing the number of orders placed by customers in Mumbai gives Swiggy insights into regional demand. This helps optimize restaurant listings, delivery operations, and marketing efforts in Mumbai, ensuring that the city's specific needs are met effectively.



- Display all orders placed in the last 30 days.

```
1 • select *  
2 from orders  
3 where order_date>=date_sub(curdate(),interval 30 day);  
4
```

Result Grid						
	order_id	customer_id	restaurant_id	order_date	total_amount	status
▶	1	1	3	2024-08-01 00:00:00	750.00	Completed
▶	2	2	5	2024-08-02 00:00:00	600.00	Completed
▶	3	3	1	2024-08-04 00:00:00	0.00	Cancelled
▶	4	4	7	2024-08-01 00:00:00	850.00	Completed
▶	5	5	2	2024-08-03 00:00:00	1200.00	Completed
▶	6	1	4	2024-08-06 00:00:00	500.00	Processing

## Recent Order Analysis:

Reviewing orders placed in the last 30 days helps Swiggy track recent customer activity and demand trends. This is crucial for adjusting delivery capacities, identifying peak times, and ensuring that Swiggy stays responsive to current market dynamics.



- List all delivery partners who have completed more than 1 delivery.

```

1 • select deliverypartners.name,
2   count(orderdelivery.order_id)
3   from deliverypartners join orderdelivery
4   on deliverypartners.partner_id = orderdelivery.partner_id
5   join deliveryupdates
6   on deliveryupdates.order_id = orderdelivery.order_id
7   where deliveryupdates.status <> "failed"
8   group by deliverypartners.name
9   having count(orderdelivery.order_id) > 1 ;

```

	name	count(orderdelivery.order_id)
▶	Suresh Reddy	5
	Anita Desai	Anita Desai
	Rajesh Gupta	3
	Priya Patel	2
	Amit Sharma	2
	Sonia Agarwal	3
	Davi Kumar	2

## Delivery Partner Performance Analysis:

**Identifying delivery partners who have completed more than one delivery helps Swiggy measure the performance and reliability of its delivery workforce. This information is used to reward top-performing partners, ensure quality service, and optimize delivery operations.**



- Find the customers who have placed orders on exactly three different days.

```
2 • select customers.name  
3   from customers join orders  
4     on customers.customer_id = orders.customer_id  
5   group by customers.name  
6   having count(distinct orders.order_date) = 3;
```

	name
▶	Anjali Patel
▶	Ashok Kumar
▶	Nidhi Saxena
▶	Priya Singh
▶	Rohini Verma
▶	Sonali Mishra

## Customer Engagement Across Different Days:

Finding customers who have placed orders on exactly three different days provides Swiggy with insights into moderate engagement levels. Swiggy can target these customers with offers or incentives to increase their order frequency and convert them into loyal customers.



- Find the delivery.partner who has worked with the most different customers.

```
1 • select deliverypartners.partner_id,  
2   deliverypartners.name,  
3   count(distinct orders.customer_id) diff_customers  
4   from deliverypartners join orderdelivery  
5   on deliverypartners.partner_id = orderdelivery.partner_id  
6   join orders  
7   on orderdelivery.order_id= orders.order_id  
8   group by deliverypartners.partner_id,  
9   deliverypartners.name  
10  order by diff_customers desc  
11  limit 1;
```

Result Grid		
partner_id	name	diff_customers
4	Suresh Reddy	6

## Delivery Partner- Customer Relationship Analysis:

**Identifying the delivery partner who has worked with the most different customers helps Swiggy recognize highly efficient partners. This analysis supports delivery partner training and reward programs, ensuring a consistent and high-quality customer experience.**



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

```

1 • SELECT DISTINCT c1.name AS customer1, c2.name AS customer2, c1.city,
2   r.name AS restaurant, o1.order_date AS order_date1, o2.order_date AS order_date2
3   FROM Customers c1
4   JOIN Orders o1 ON c1.customer_id = o1.customer_id
5   JOIN Orders o2 ON o1.restaurant_id = o2.restaurant_id
6   JOIN Customers c2 ON c1.city = c2.city
7           AND c1.customer_id <> c2.customer_id
8           AND o2.customer_id = c2.customer_id
9   JOIN Restaurants r ON o1.restaurant_id = r.restaurant_id
10 WHERE o1.order_date <> o2.order_date
11 ORDER BY c1.city, r.name, o1.order_date;

```

	customer1	customer2	city	restaurant	order_date1	order_date2
▶	Manish Kumar	Sonali Mishra	Delhi	Biryani House	2024-08-04 00:00:00	2024-08-05 00:00:00
	Sonali Mishra	Manish Kumar	Delhi	Biryani House	2024-08-05 00:00:00	2024-08-04 00:00:00
	Sonali Mishra	Manish Kumar	Delhi	Biryani House	2024-08-05 00:00:00	2024-08-07 00:00:00
	Manish Kumar	Sonali Mishra	Delhi	Biryani House	2024-08-07 00:00:00	2024-08-05 00:00:00
	Arjun Desai	Ravi Singh	Mumbai	Veggie Delight	2024-08-03 00:00:00	2024-08-09 00:00:00
	Ravi Singh	Arjun Desai	Mumbai	Veggie Delight	2024-08-09 00:00:00	2024-08-03 00:00:00

## Shared Customer and Restaurant Analysis:

Finding customers who share the same city and have ordered from the same restaurants on different dates allows Swiggy to uncover popular dining trends. This insight can be used to enhance restaurant recommendations and predict future customer behavior, leading to more personalized service.



# conclusion

This project demonstrates the power of SQL in uncovering valuable insights from Swiggy's data. By analyzing customer orders, restaurant ratings, and delivery partner performance, success of the platform.



we can identify patterns and trends that help Swiggy make informed decisions. These insights contribute to improving customer satisfaction, optimizing operations, and driving the overall



*Follow to get  
more  
information  
like this*

