Swiggy SQL Case Study

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Introduction

This case study explores the use of SQL to analyze business performance metrics and gain actionable insights. The focus is on key aspects such as restaurant revenue, top customers, average delivery partner ratings, and popular food items. By leveraging SQL queries, the study aims to empower data-driven decision-making and improve operational efficiency.

Objectives

- Analyze restaurant revenue trends to identify growth opportunities.
- Determine the top-performing customers based on order frequency and spending.
- Evaluate the average ratings of delivery partners to assess service quality.
- Identify the most popular food items to optimize menu offerings.
- Provide insights to enhance customer satisfaction and streamline operations.

Outcomes

- Comprehensive analysis of restaurant revenue, highlighting high-performing locations.
- A ranked list of top customers with their purchase patterns.
- Insights into delivery partner performance through average rating analysis.
- Identification of the most frequently ordered and popular food items.
- Actionable recommendations to enhance overall business efficiency and profitability.

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FOOD DELIVERY APP

Customers who have never ordered

```sql
select u.user_id, u.name
from users as u
left join orders as o
on u.user_id = o.user_id
where o.user_id is null
```

	user_id integer	name character varying (50)
1	6	Anupama
2	7	Rishab

Average Price/Dish

```sql
select f.f_name as dish,
round(avg(price), 2) as avg_price
from food as f
left join menu as m
on f.f_id = m.f_id
group by dish
```

	dish character varying (50)	avg_price numeric
1	Roti meal	140.00
2	Rice Meal	213.33
3	Rava Idli	120.00
4	Chicken Wings	230.00
5	Chicken Popcorn	300.00
6	Choco Lava cake	98.33
7	Schezwan Noodles	220.00
8	Non-veg Pizza	450.00
9	Veg Pizza	400.00
10	Veg Manchurian	180.00
11	Masala Dosa	180.00

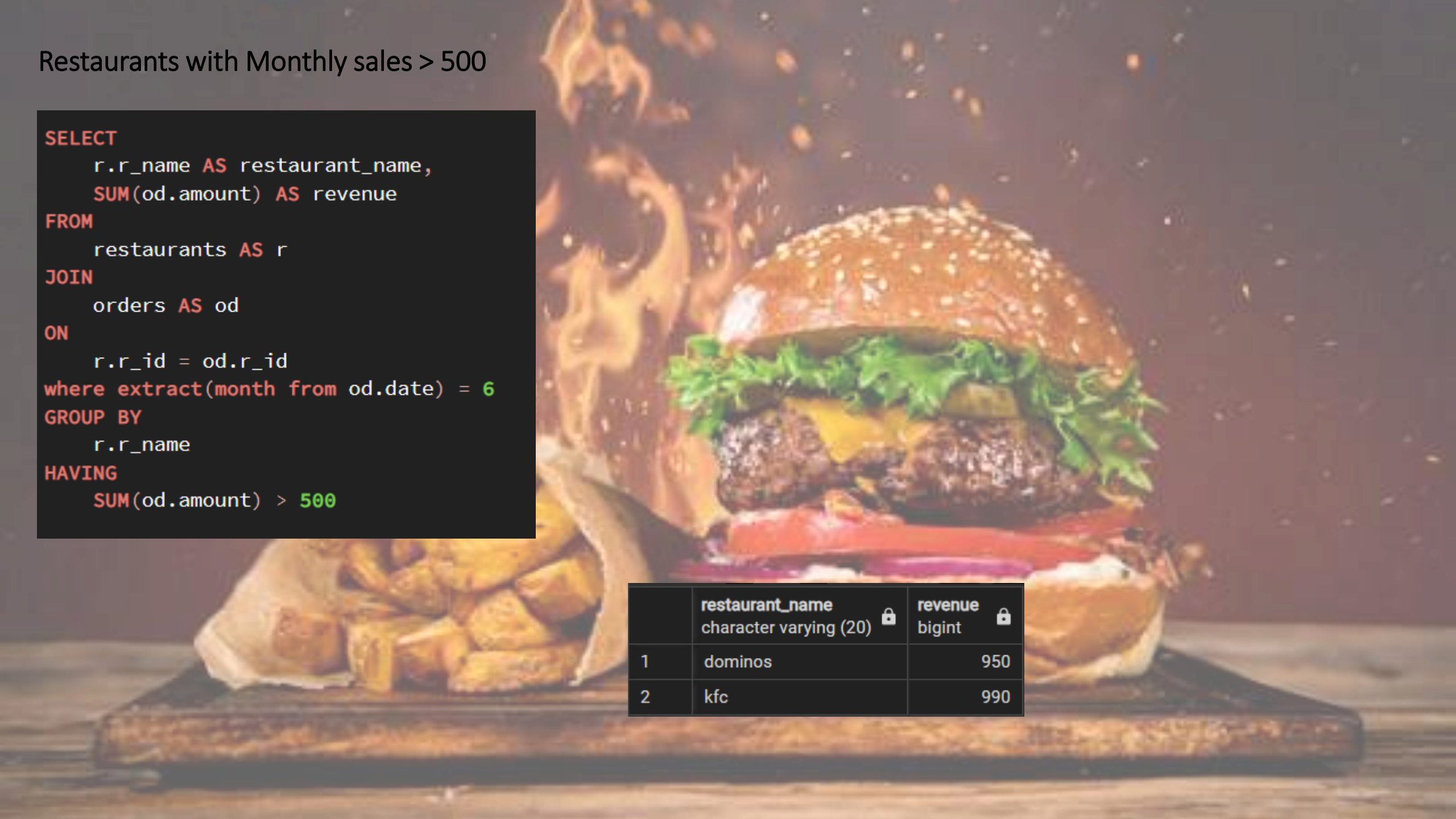
Find top restaurants in terms of number of orders for a given month

```sql
select r.r_name as restaurant_name,
       count(o.order_id) as total_orders
from restaurants as r
left join orders as o
on o.r_id = r.r_id
where DATE_PART('month', o.date) = 5
and DATE_PART('year', o.date) = 2022
group by r.r_name
order by total_orders desc
limit 3;
```

	restaurant_name character varying (20)	total_orders bigint
1	Dosa Plaza	3
2	dominos	2
3	kfc	2

Restaurants with Monthly sales > 500

```sql
SELECT
    r.r_name AS restaurant_name,
    SUM(od.amount) AS revenue
FROM
    restaurants AS r
JOIN
    orders AS od
ON
    r.r_id = od.r_id
where extract(month from od.date) = 6
GROUP BY
    r.r_name
HAVING
    SUM(od.amount) > 500
```



	restaurant_name character varying (20)	revenue bigint
1	dominos	950
2	kfc	990

Month over month revenue by Swiggy

```
select
    extract(month from orders.date) as month,
    sum(amount) as monthly_revenue
from orders
group by
extract(month from orders.date)
order by month asc
```

	month numeric	monthly_revenue bigint
1	5	2425
2	6	3220
3	7	4845

Average delivery time taken by each delivery partner

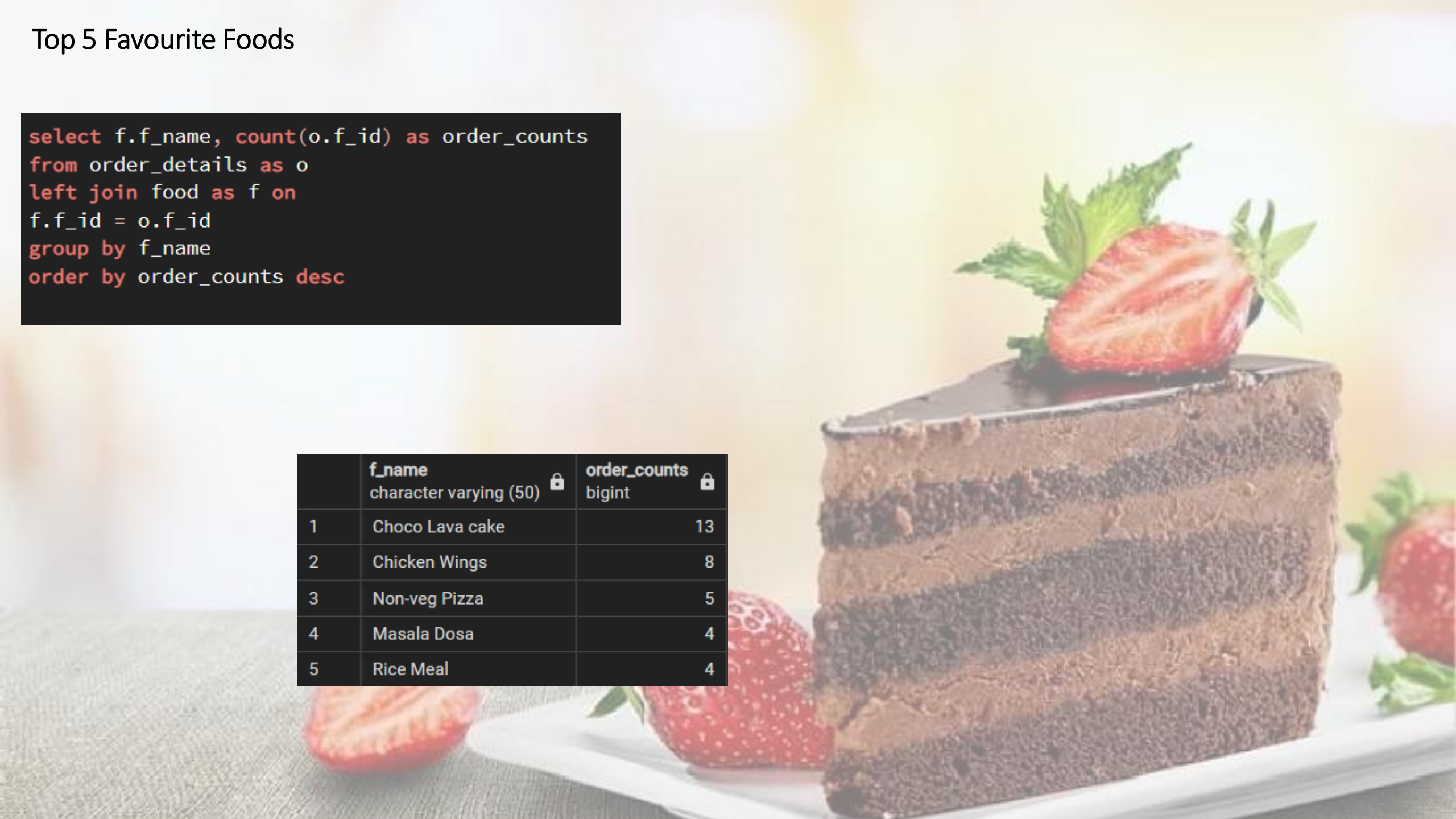
```sql
select d.partner_id,
    d.partner_name as delivery_partner,
    round(avg(o.delivery_time),2) as avg_delivery_time
    from delivery_partner as d
    join orders as o
    on d.partner_id = o.partner_id
    group by d.partner_id, d.partner_name
```

	partner_id integer	delivery_partner character varying (20)	avg_delivery_time numeric
1	2	Amit	39.67
2	3	Lokesh	34.50
3	1	Suresh	46.14
4	5	Gyandeep	29.25
5	4	Kartik	41.50

Top 5 Favourite Foods

```
select f.f_name, count(o.f_id) as order_counts
from order_details as o
left join food as f on
f.f_id = o.f_id
group by f_name
order by order_counts desc
```

	f_name character varying (50)	order_counts bigint
1	Choco Lava cake	13
2	Chicken Wings	8
3	Non-veg Pizza	5
4	Masala Dosa	4
5	Rice Meal	4

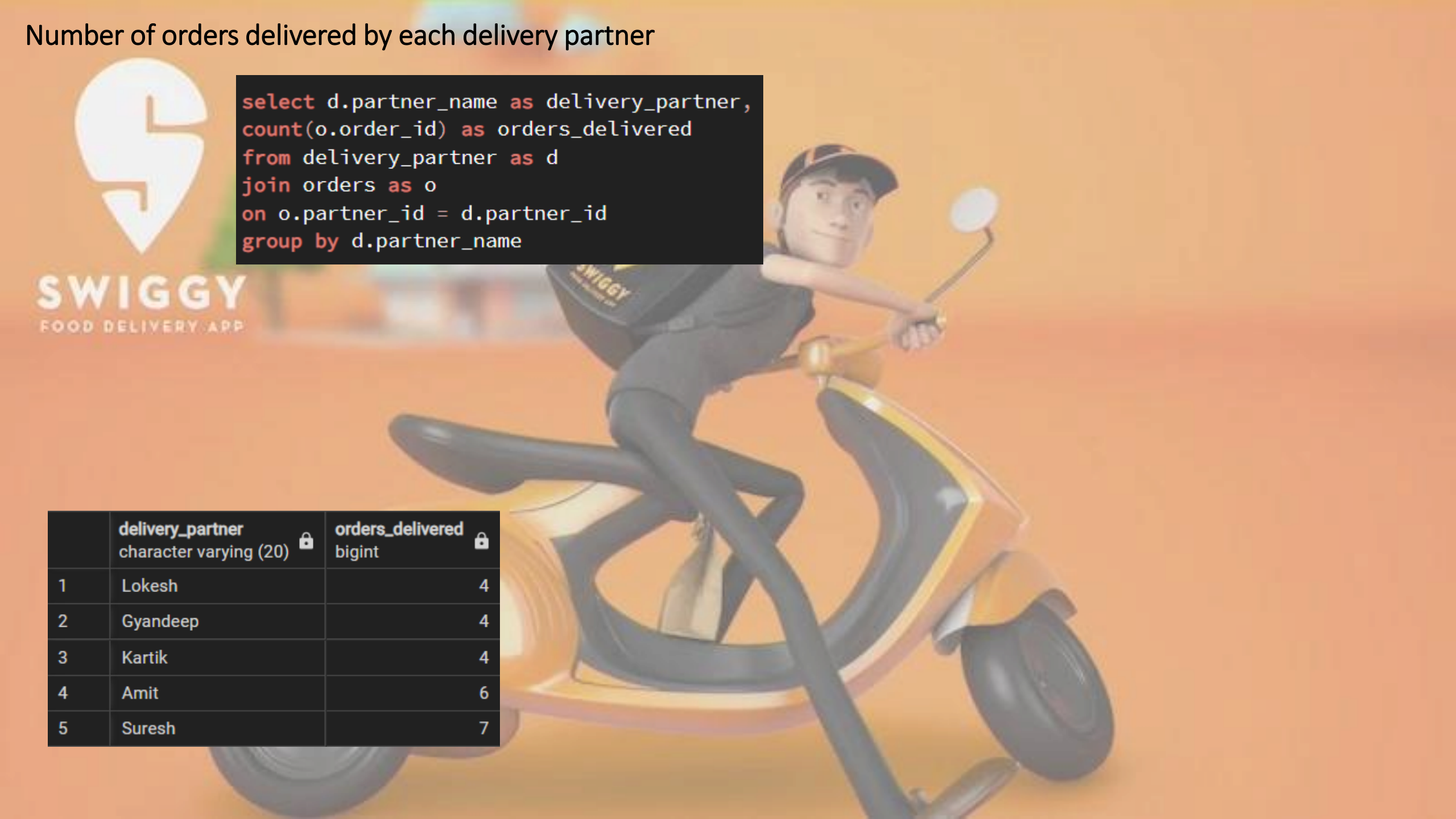


Average rating of Restaurants

```sql
select r.r_name as restaurant_name,
round(avg(o.restaurant_rating),2) as rating
from orders as o
left join restaurants as r
on r.r_id = o.r_id
group by r.r_name
order by rating desc
```

	restaurant_name character varying (20)	rating numeric
1	box8	4.67
2	Dosa Plaza	3.67
3	China Town	3.67
4	kfc	2.20
5	dominos	1.67

Number of orders delivered by each delivery partner




```sql
select d.partner_name as delivery_partner,
count(o.order_id) as orders_delivered
from delivery_partner as d
join orders as o
on o.partner_id = d.partner_id
group by d.partner_name
```

	delivery_partner character varying (20)	orders_delivered bigint
1	Lokesh	4
2	Gyandeep	4
3	Kartik	4
4	Amit	6
5	Suresh	7

Total revenue generated by each restaurants

```
select r.r_name as restaurant_name,
    sum(o.amount) as total_revenue
    from restaurants as r
    join orders as o on
    r.r_id = o.r_id
    group by r.r_name
    order by total_revenue desc
```

	restaurant_name character varying (20)	total_revenue bigint
1	kfc	3570
2	dominos	3050
3	Dosa Plaza	1480
4	China Town	1450
5	box8	940

Number of orders by each customer

```sql
select u.user_id,
    u.name as customer_name,
    count(o.order_id) as orders_count
from users as u
left join orders as o
on u.user_id = o.user_id
group by u.user_id, u.name
order by orders_count desc
```

	user_id integer	customer_name character varying (50)	orders_count bigint
1	5	Neha	5
2	3	Vartika	5
3	2	Khushboo	5
4	4	Ankit	5
5	1	Nitish	5
6	7	Rishab	0
7	6	Anupama	0

Average rating of delivery partner

```sql
select o.partner_id, d.partner_name,
 round(avg(delivery_rating),1) as average_rating
 from orders as o
 join delivery_partner as d on
 o.partner_id = d.partner_id
 group by o.partner_id, d.partner_name
 order by o.partner_id asc
```

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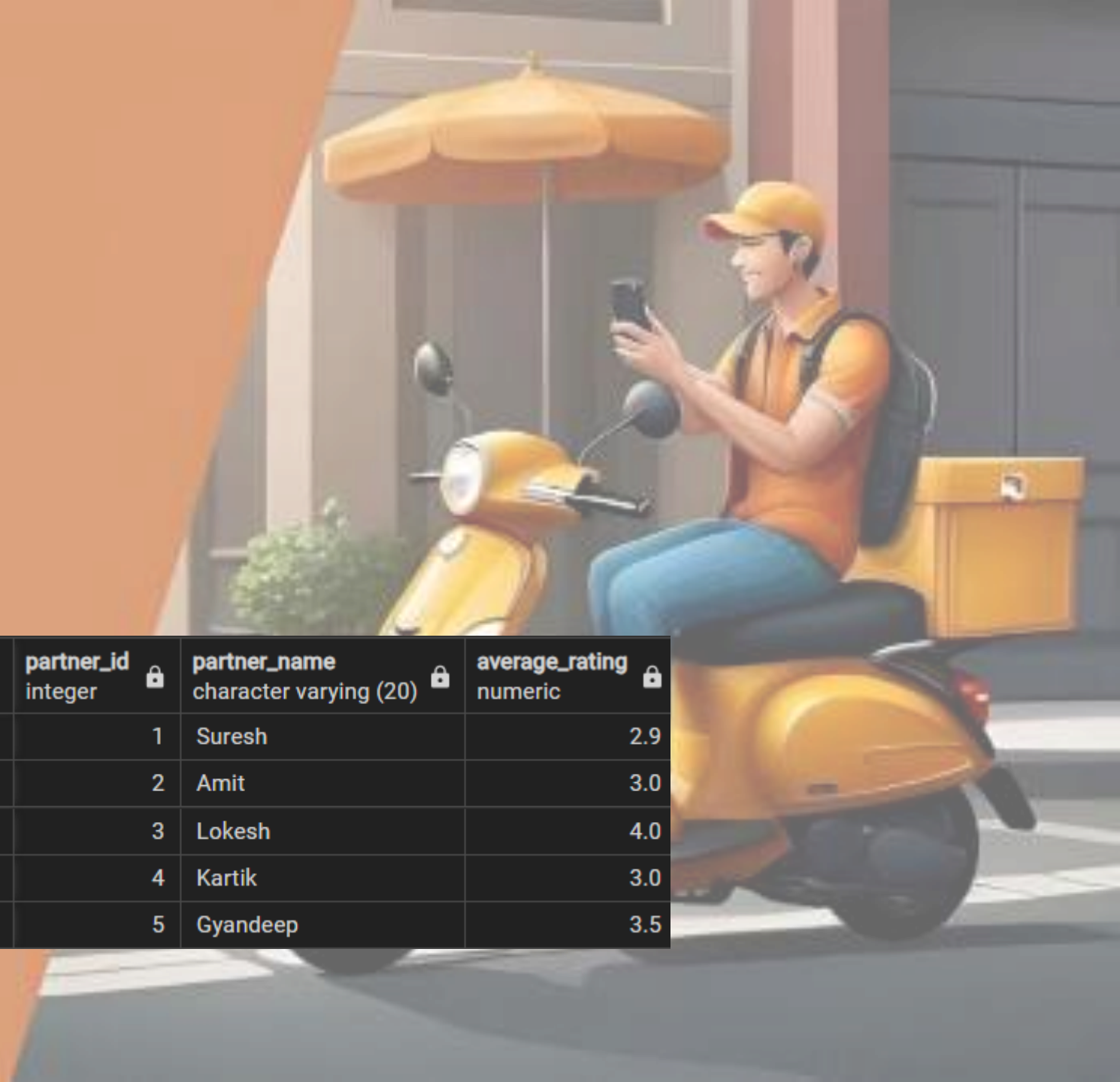

	partner_id integer	partner_name character varying (20)	average_rating numeric
1	1	Suresh	2.9
2	2	Amit	3.0
3	3	Lokesh	4.0
4	4	Kartik	3.0
5	5	Gyandeep	3.5