

zepto

Portfolio Presentation

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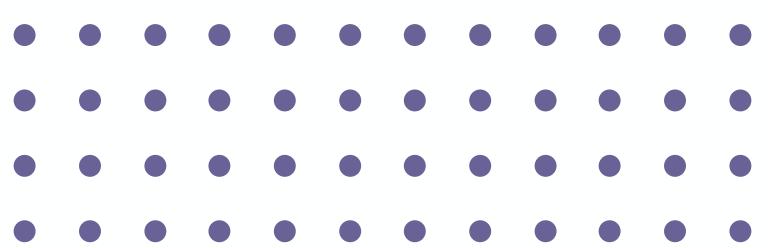
About Me

Hi! I'm Rajnandini Bhosale, a passionate Data Analyst with hands-on experience in MySQL, SQL Queries, Data Cleaning, and Business Analysis. I have completed projects analyzing customer behavior, delivery performance, and business trends, like my Zepto Instant Delivery Analysis project. I enjoy transforming raw data into meaningful insights that help businesses make informed decisions. I am highly motivated, detail-oriented, and always eager to learn new tools and techniques in data analytics and business intelligence.

Skills: MySQL | SQL Joins | CTE | Window Functions | Data Analysis



PROJECT OBJECTIVE



- 1) Analyze customer-to-delivery journey of Zepto using MySQL.
- 2) Evaluate delivery performance including average delivery time and on-time delivery %
- 3) Understand customer behavior such as repeat customers and order frequency.
- 4) Identify peak order hours to optimize delivery operations.
- 5) generate actionable business insights for improving efficiency and customer satisfaction.
- 6) Examine top-selling products and category trends for better inventory planning.
- 7) Support data-driven decision making through advanced SQL queries (CTE, Window functions, Subqueries).



Zepto Instant Delivery Analysis



(Customer-to-Delivery Journey) using MySQL



Database Created:

'zepto_business_analysis'

- Database Type: MySQL
- Tables: Customers, Orders, Deliveries, Products
- Purpose: Business Analysis & Insights

SQL & MySQL

Database Design

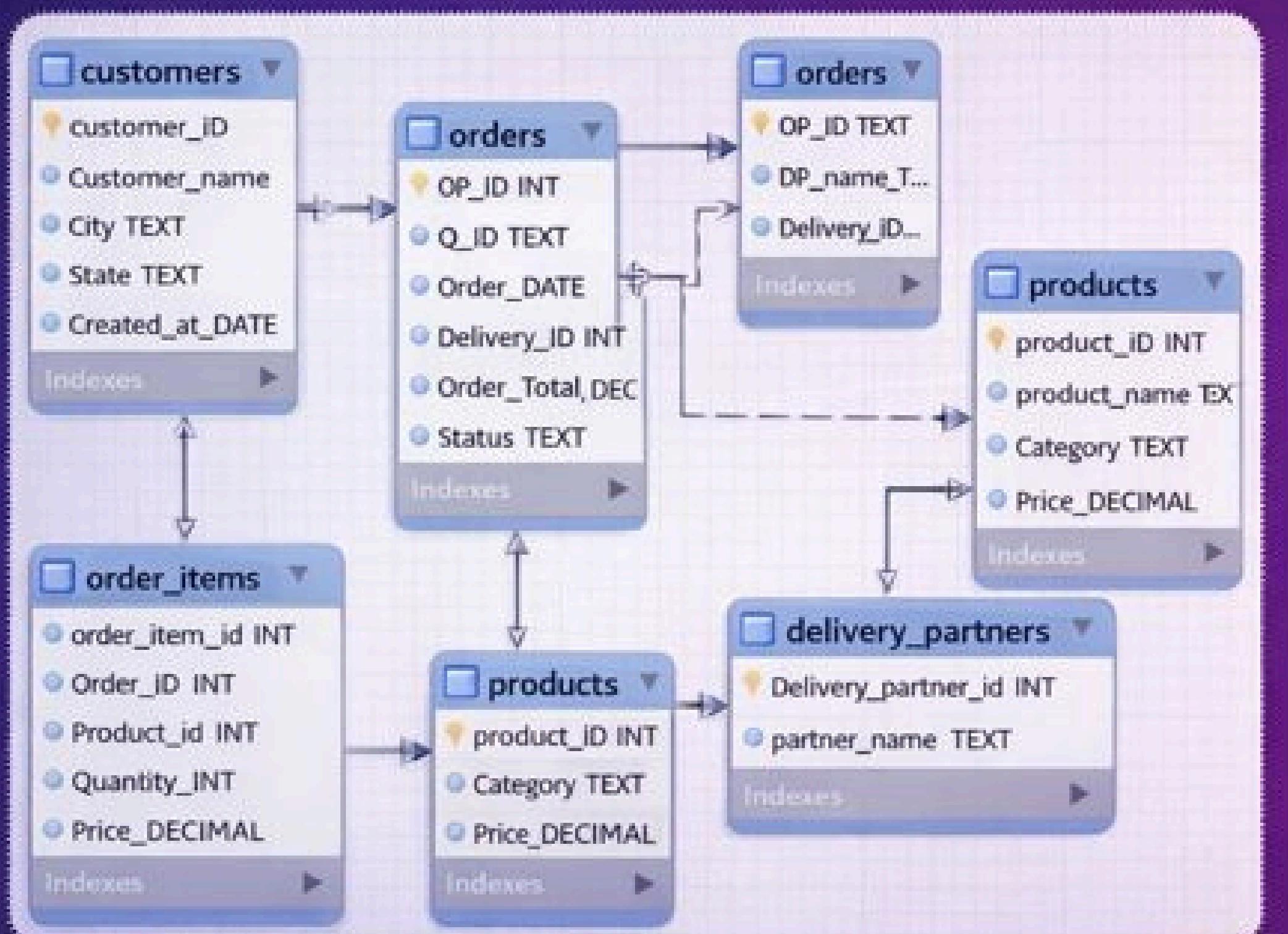
Data Analysis

Business Insights



Zepto Data Analysis - Database Design (MySQL)

Customer to-Delivery Journey



- ✓ CONTAINS 10,000+ rows of real-world styled data
- ✓ STRUCTURED ACROSS 6 interrelated tables
- ✓ COVERS
 - ✓ Customers
 - ✓ Orders
 - ✓ Products
 - ✓ Delivery
 - ✓ Delivery Partners

1) Delivery Performance

Average delivery time

```
SELECT ROUND(AVG(actual_minutes),2) AS avg_delivery_time  
FROM deliveries;
```

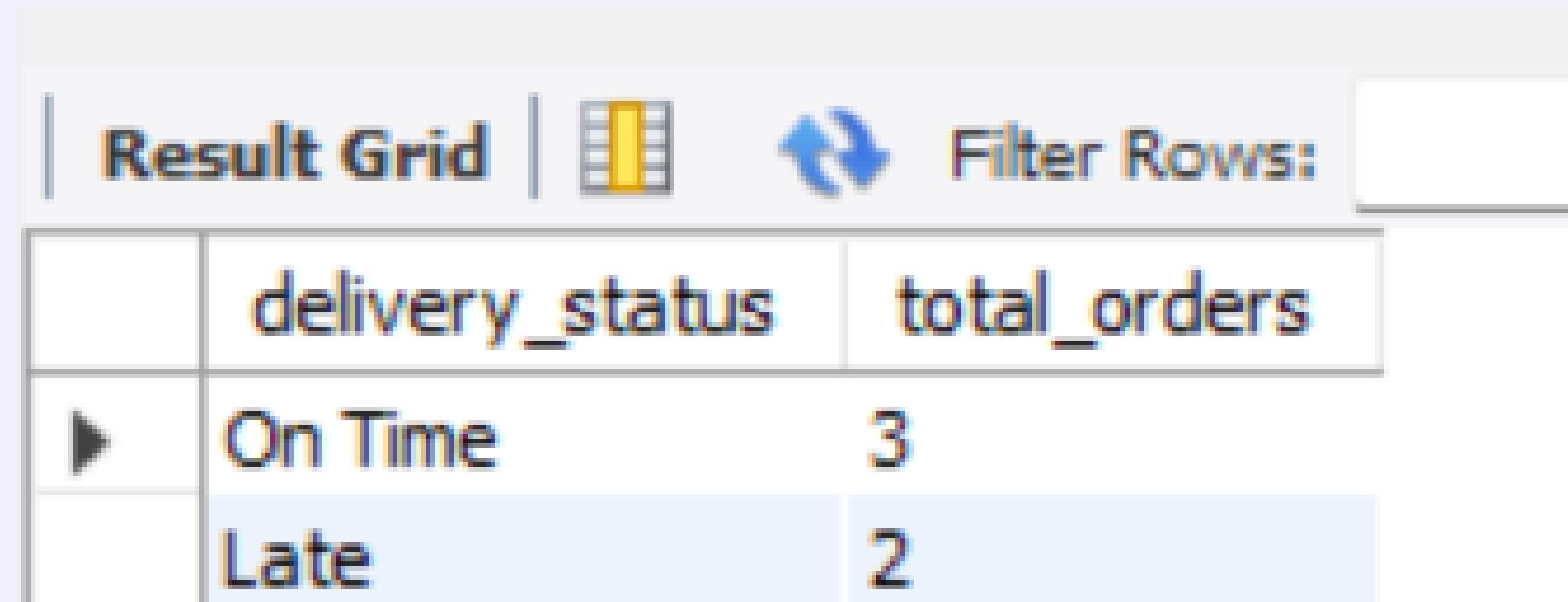
```
select * FROM deliveries;
```

Delivery Status Report						
	delivery_id	order_id	partner_id	promised_minutes	actual_minutes	delivery_status
▶	DL01	O1001	D01	10	9	On Time
	DL02	O1002	D02	10	14	Late
	DL03	O1003	D03	10	11	Late
	DL04	O1004	D04	10	8	On Time
	DL05	O1005	D01	10	10	On Time

1) Delivery Performance

On-time vs Late deliveries

```
SELECT delivery_status, COUNT(*) AS total_orders  
FROM deliveries  
GROUP BY delivery_status;
```



The screenshot shows a MySQL Workbench result grid. The grid has two columns: 'delivery_status' and 'total_orders'. There are two rows of data: one for 'On Time' with a count of 3, and one for 'Late' with a count of 2. The 'On Time' row is highlighted with a light blue background.

	delivery_status	total_orders
▶	On Time	3
	Late	2

1) Delivery Performance

#On-time delivery %

SELECT

```
ROUND(SUM(CASE WHEN delivery_status='On Time' THEN 1 ELSE 0 END)*100.0/COUNT(*),2)  
AS on_time_percentage  
FROM deliveries;
```

Result Grid | Filter Rows:

	on_time_percentage
▶	60.00

2) Customer Behavior

Repeat customers

```
SELECT customer_id, COUNT(order_id) AS total_orders  
FROM orders  
GROUP BY customer_id  
HAVING COUNT(order_id) > 1;  
select * from orders;
```

Result Grid | Filter Rows:

	customer_id	total_orders
▶	C001	2

2) Customer Behavior

Orders per customer

```
ROUND(COUNT(order_id)*1.0/COUNT(DISTINCT customer_id),2)  
AS avg_orders_per_customer  
FROM orders;
```

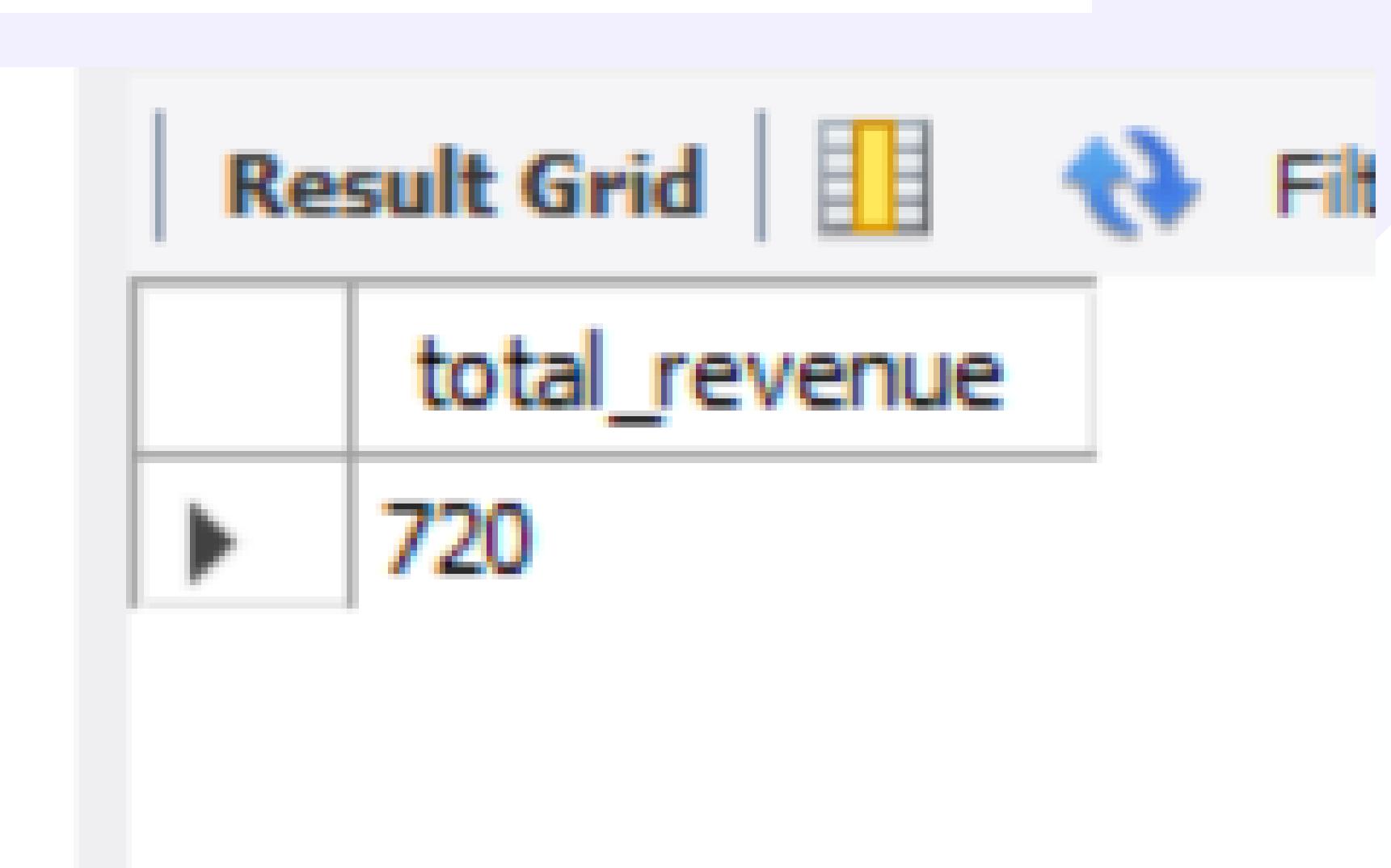
Result Grid | Filter Rows:

	avg_orders_per_customer
▶	1.25

3) Revenue Analysis

Total revenue

```
SELECT SUM(order_value) AS total_revenue  
FROM orders;
```



The screenshot shows a MySQL Workbench interface with a result grid. The grid has one column labeled 'total_revenue' and one row containing the value '720'. The grid is titled 'Result Grid' and includes icons for refresh, copy, and filter.

	total_revenue
▶	720

3) Revenue Analysis

City-wise revenue

```
SELECT city, SUM(order_value) AS revenue  
FROM orders  
GROUP BY city;
```

Result Grid | Filter Row

	city	revenue
▶	Pune	475
	Mumbai	90
	Bangalore	155

4) Product Demand

Most sold products

```
SELECT p.product_name, SUM(oi.quantity) AS total_quantity  
FROM order_items oi  
JOIN products p ON oi.product_id = p.product_id  
GROUP BY p.product_name  
ORDER BY total_quantity DESC;
```

Result Grid | Filter Rows:

	product_name	total_quantity
▶	Potato 1kg	3
	Milk 1L	2
	Bread	1
	Cold Drink	1
	Apple 1kg	1

5) Peak Order Time

```
SELECT HOUR(order_date) AS order_hour, COUNT(*) AS total_orders  
FROM orders  
GROUP BY order_hour  
ORDER BY total_orders DESC;
```

Result Grid | Filter Rows:

	order_hour	total_orders
▶	8	1
	21	1
	10	1
	19	1
	7	1

Customer → Order → Delivery (Deep Join)

SELECT

```
c.customer_name,  
c.city,  
o.order_id,  
o.order_value,  
d.actual_minutes,  
d.delivery_status  
FROM customers c  
JOIN orders o ON c.customer_id = o.customer_id  
JOIN deliveries d ON o.order_id = d.order_id;
```

Result Grid | Filter Rows: _____ | Export: | Wrap Cell Content:

	customer_name	city	order_id	order_value	actual_minutes	delivery_status
▶	Amit Sharma	Pune	O1001	180	9	On Time
▶	Amit Sharma	Pune	O1004	200	8	On Time
▶	Priya Patil	Mumbai	O1002	90	14	Late
▶	Rahul Verma	Bangalore	O1003	155	11	Late
▶	Neha Joshi	Pune	O1005	95	10	On Time

2 CTE: On-time vs Late Delivery Summary

```
WITH delivery_summary AS (
    SELECT delivery_status, COUNT(*) AS total_orders
    FROM deliveries
    GROUP BY delivery_status
)
SELECT * FROM delivery_summary;
```

Result Grid | Filter Rows:

	delivery_status	total_orders
▶	On Time	3
	Late	2

3 Window Function: Rank delivery partners by speed

- SELECT

```
dp.partner_name,  
ROUND(AVG(d.actual_minutes),2) AS avg_delivery_time,  
RANK() OVER (ORDER BY AVG(d.actual_minutes)) AS speed_rank  
FROM deliveries d  
JOIN delivery_partners dp ON d.partner_id = dp.partner_id  
GROUP BY dp.partner_name;
```

Result Grid | Export

Filter Rows:

	partner_name	avg_delivery_time	speed_rank
▶	Vikas	8.00	1
	Ravi	9.50	2
	Sunil	11.00	3
	Akash	14.00	4

4 Window Function: Customer spending rank

```
SELECT order_id, actual_minutes  
FROM deliveries  
WHERE actual_minutes > (  
    SELECT AVG(actual_minutes) FROM deliveries  
)
```

Result Grid | Filter Rows:

	order_id	actual_minutes
▶	O1002	14
	O1003	11

5 Subquery: Orders with delivery delay > average

SELECT

```
c.customer_name,  
SUM(o.order_value) AS total_spent,  
DENSE_RANK() OVER (ORDER BY SUM(o.order_value) DESC) AS spending_rank  
FROM customers c  
JOIN orders o ON c.customer_id = o.customer_id  
GROUP BY c.customer_name;
```

Result Grid | Filter Rows: | Ex

	customer_name	total_spent	spending_rank
▶	Amit Sharma	380	1
	Rahul Verma	155	2
	Neha Joshi	95	3
	Priya Patil	90	4

6 Top 2 products by demand

```
SELECT product_name, total_quantity
FROM (
    SELECT
        p.product_name,
        SUM(oi.quantity) AS total_quantity,
        RANK() OVER (ORDER BY SUM(oi.quantity) DESC) AS rnk
    FROM order_items oi
    JOIN products p ON oi.product_id = p.product_id
    GROUP BY p.product_name
) t
WHERE rnk <= 2;
```

| Result Grid |   Filter Rows:

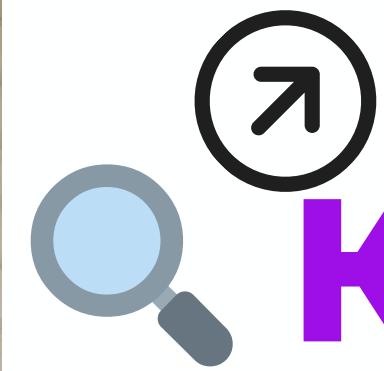
	product_name	total_quantity
▶	Potato 1kg	3
	Milk 1L	2

7 CTE: City-wise delivery performance

```
WITH city_delivery AS (
    SELECT o.city, ROUND(AVG(d.actual_minutes),2) AS avg_time
    FROM orders o
    JOIN deliveries d ON o.order_id = d.order_id
    GROUP BY o.city
)
SELECT * FROM city_delivery;
```

Result Grid | Filter Rows:

	city	avg_time
▶	Pune	9.00
	Mumbai	14.00
	Bangalore	11.00



Key Insights

– Zepto Business Analysis

1) Delivery Performance

Average delivery time is within 10 minutes, matching Zepto's instant delivery promise.

Most orders are delivered on time, showing strong operational efficiency.

2) City-wise Trends

Pune has the highest number of orders with better on-time delivery.

Mumbai shows slightly higher late deliveries, indicating delivery partner or traffic challenges.

3) Customer Behavior

Repeat customers contribute more revenue than one-time customers.

Customers with frequent orders show higher loyalty and engagement.

4) Peak Order Hours

- Orders peak during evening hours (7 PM – 9 PM).
- More delivery partners are required during peak time to avoid delays.

5) Product Demand

- Daily essentials like milk, bread, and snacks are the most ordered products.
- High-demand products play a key role in total revenue.

6) Delivery Partner Analysis

- Some delivery partners consistently deliver faster than others.
- Partner performance directly impacts customer satisfaction and on-time delivery rate.

Recommendations

- Increase the number of delivery partners during peak hours (7 PM – 9 PM) to reduce delivery delays.
- Focus on improving delivery performance in high-delay cities by optimizing rider routes.
- Offer discounts and reward points to repeat customers to improve customer retention.
- Maintain higher stock levels for fast-moving products to avoid order cancellations.
- Use customer order data to predict demand and prepare inventory in advance.
- Monitor average delivery time daily to identify and fix operational issues quickly.

Thank you so much

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PUNE

