

## Pizza Sales Data Analysis – MySQL Queries

### Summary:

This document contains a tested MySQL query for calculating total revenue from the Pizza\_Sales table in the pizzahut schema.

### Query (1) – Calculate Rounded Total Revenue:

**SQL Query:** `SELECT ROUND(SUM(total_price), 2) AS Total_Revenue FROM Pizza_Sales;`

### Purpose:

Calculates the sum of all sales (total\_price) and rounds the result to two decimal places for easier reading.

### Result Image:

	Total_Revenue
▶	336440.6

### Query (2) – Calculate Average Order Value (AOV):

### SQL Query:

`SELECT ROUND(SUM(total_price) / COUNT(DISTINCT order_id), 2) AS Avg_Order_Value  
FROM Pizza_Sales;`

### Purpose:

Calculates the Average Order Value by dividing the total revenue (SUM(total\_price)) by the number of unique orders (COUNT(DISTINCT order\_id)), rounded to two decimal places.

### Result Image:

	Avg_Order_Value
▶	38.25

### Query (3) – Total Pizzas Sold:

SQL Query: `SELECT SUM(quantity) AS Total_pizza_sold FROM Pizza_Sales;`

**Purpose:**

Calculates the total number of pizzas sold by summing all values in the quantity column.

**Result Image:**

	Total_pizza_sold
▶	20383

### Query (4) – Total Orders:

SQL Query: `SELECT COUNT(DISTINCT order_id) AS Total_Orders FROM Pizza_Sales;`

**Purpose:**

Counts the total number of unique orders by identifying distinct order\_id values in the sales table.

**Result Image:**

	Total_Orders
▶	8796

### Query (5) – Average Pizzas per Order:

SQL Query: simplified version using ROUND():

**SQL Query:**

`SELECT ROUND(SUM(quantity) / COUNT(DISTINCT order_id), 2) AS Avg_Pizzas_per_order  
FROM Pizza_Sales;`

**Purpose:**

Calculates the average number of pizzas sold per order by dividing the total quantity of pizzas by the number of unique orders, with the result rounded to two decimal places for clarity.

**Result Image:** (I used alternative)

	Avg_Pizzas_per_order
▶	2.32

### Query (6) – Daily Trend for Total Orders:

**SQL Query:**

```
SELECT
    DAYNAME(STR_TO_DATE(order_date, '%d-%m-%Y')) AS order_day,
    COUNT(DISTINCT order_id) AS total_orders
FROM Pizza_Sales
WHERE order_date IS NOT NULL
    AND order_date <> "
    AND STR_TO_DATE(order_date, '%d-%m-%Y') IS NOT NULL
GROUP BY order_day
ORDER BY FIELD(order_day,
    'Monday', 'Tuesday', 'Wednesday',
    'Thursday', 'Friday', 'Saturday', 'Sunday');
```

### Purpose:

Analyzes the daily pattern of order volume, showing how many unique orders are placed on each day of the week.

Expected Result:

A table with two columns:

- order\_day: The weekday name (e.g., "Monday")
- total\_orders: The count of unique orders made on that day

This lets you compare order counts across weekdays to identify your busiest days.

### Result Image:

	order_day	total_orders
▶	Monday	1234
	Tuesday	1213
	Wednesday	1254
	Thursday	1275
	Friday	1454
	Saturday	1263
	Sunday	1103

## Query (7) – Hourly Trend for Orders:

### SQL Query:

```
SELECT  
    HOUR(order_time) AS order_hours,  
    COUNT(DISTINCT order_id) AS total_orders  
FROM Pizza_Sales  
GROUP BY HOUR(order_time)  
ORDER BY HOUR(order_time);
```

### Purpose:

Shows how many unique orders are placed in each hour of the day, helping identify peak order times.

Expected Result:

A table with:

- order\_hours → hour of the day in 24-hour format (e.g., 0 = midnight, 13 = 1 PM)
- total\_orders → number of unique orders placed during that hour.

### Result Image:

	order_hours	total_orders
▶	10	4
	11	487
	12	1043
	13	989
	14	640
	15	590
	16	785
	17	1044
	18	947
	19	844
	20	671
	21	483
	22	262
	23	7

## Query (8) – Percentage of Sales by Pizza Category:

SQL Query:

```
SELECT
    pizza_category,
    CAST(SUM(total_price) AS DECIMAL(10,2)) AS total_revenue,
    CAST(SUM(total_price) * 100 /
        (SELECT SUM(total_price) FROM Pizza_Sales)
        AS DECIMAL(10,2)) AS PCT
FROM Pizza_Sales
GROUP BY pizza_category;
```

**Purpose:**

Calculates total sales revenue for each pizza category and the percentage share of the total sales that category represents.

Expected Result:

A table with:

- pizza\_category → name of the category (e.g., "Classic", "Veggie", "Chicken")
- total\_revenue → total revenue for that category, rounded to 2 decimals
- PCT → percentage of overall sales from that category, rounded to 2 decimals

**Result Image:**

	pizza_category	total_revenue	PCT
▶	Classic	89853.05	26.71
	Veggie	80751.80	24.00
	Supreme	85459.75	25.40
	Chicken	80376.00	23.89

## Query (9) – Percentage of Sales by Pizza Size:

SQL Query:

```
SELECT
    pizza_size,
    CAST(SUM(total_price) AS DECIMAL(10,2)) AS total_revenue,
    CAST(SUM(total_price) * 100 /
        (SELECT SUM(total_price) FROM Pizza_Sales)
        AS DECIMAL(10,2)) AS PCT
FROM Pizza_Sales
GROUP BY pizza_size
ORDER BY pizza_size;
```

**Purpose:**

Breaks down sales revenue by pizza size and shows the percentage each size contributes to total sales.

**Result Image:**

	pizza_size	total_revenue	PCT
▶	L	154413.55	45.90
	M	102126.00	30.35
	S	73124.75	21.73
	XL	6273.00	1.86
	XXL	503.30	0.15

## Query (10) – Total Pizzas Sold by Category (February Only):

SQL Query:

```
SELECT
    pizza_category,
    SUM(quantity) AS Total_Quantity_Sold
FROM Pizza_Sales
WHERE
    order_date IS NOT NULL
    AND order_date <> ''
    AND STR_TO_DATE(order_date, '%d-%m-%Y') IS NOT NULL
    AND MONTH(STR_TO_DATE(order_date, '%d-%m-%Y')) = 2
GROUP BY pizza_category
ORDER BY Total_Quantity_Sold DESC;
```

**Purpose:**

Displays, for each pizza category, the total number of pizzas sold in February by summing the quantity column for orders in that month, grouped and ranked by category.

**Result Image:**

	pizza_category	Total_Quantity_Sold
▶	Classic	1178
	Supreme	964
	Veggie	944
	Chicken	875

## Query (11) – Top 5 Best Sellers by Total Pizzas Sold:

SQL Query:

```
SELECT
    pizza_name,
    SUM(quantity) AS Total_Pizza_Sold
FROM Pizza_Sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold DESC
LIMIT 5;
```

**Purpose:**

Finds the five most popular pizzas based on total quantity sold, ranking them from highest to lowest.

**Result Image:**

	pizza_name	Total_Pizza_Sold
▶	The Barbecue Chicken Pizza	1046
	The Pepperoni Pizza	1009
	The Hawaiian Pizza	997
	The Classic Deluxe Pizza	980
	The California Chicken Pizza	958

**Query (12) – Bottom 5 Best Sellers by Total Pizzas Sold:****SQL Query:**

```
SELECT
    pizza_name,
    SUM(quantity) AS Total_Pizza_Sold
FROM Pizza_Sales
GROUP BY pizza_name
ORDER BY Total_Pizza_Sold ASC
LIMIT 5;
```

**Purpose:**

Lists the five lowest-selling pizzas based on total quantity sold, ranking from the smallest to largest number sold.

**Result Image:**

	pizza_name	Total_Pizza_Sold
▶	The Brie Carre Pizza	200
	The Mediterranean Pizza	370
	The Calabrese Pizza	375
	The Spinach Pesto Pizza	390
	The Chicken Pesto Pizza	395





