**Problem Statement**

The goal of this analysis is to assess the performance of pizza sales in 2015 by examining key metrics such as total revenue, order value, and sales volume across different pizza categories and sizes. By identifying top-selling items, daily and monthly sales trends, and category-specific contributions, this analysis aims to reveal actionable insights to optimize pricing strategies, inventory management, and marketing efforts. The ultimate objective is to enhance revenue growth, increase customer satisfaction, and improve operational efficiency by understanding customer preferences and business dynamics in the pizza market.

### ****KPI Analysis****

The KPIs identified for this analysis are as follows:

1. **TOTAL REVENUE:** This KPI represents the overall revenue generated from pizza sales

**Query**: select sum(total\_price) as Total\_revenue from pizza\_sales

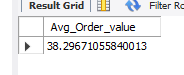
**Output**:



1. **Average Order Value:** Measures the average value of each order.

**Query**: select sum(total\_price)/count(distinct order\_id) as Avg\_Order\_value from pizza\_sales

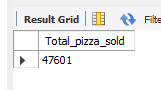
**Output**: The overall quantity of pizzas sold.



1. **Total Pizza sold:** The overall quantity of pizzas sold.

**Query**: select sum(quantity) as Total\_pizza\_sold from pizza\_sales

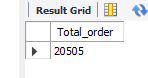
**Output**:



1. **Total Orders:** The count of unique orders placed.

**Query**: select count(distinct order\_id) as Total\_order from pizza\_sales

**Output:**



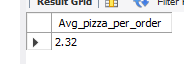
1. **Average Pizza Per Order:** Calculates the average number of pizzas per order

**Query**: SELECT

CAST(SUM(quantity) / COUNT(DISTINCT order\_id) AS DECIMAL (10 , 2 )) AS Avg\_pizza\_per\_order

FROM pizza\_sales

**Output**



### ****Trend and Insights****

This section provides insights into order trends over time and customer preferences across different pizza categories and sizes.

#### **Order Trends**

1. **Daily Trend For total Orders**

Identifies patterns in order volume by day of the week.

**Query**: SELECT DAYNAME(STR\_TO\_DATE(order\_date, '%Y-%m-%d')) AS order\_day,

COUNT(DISTINCT order\_id) AS total\_orders

FROM pizza\_sales

GROUP BY DAYNAME(STR\_TO\_DATE(order\_date, '%Y-%m-%d'));

**Output**

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1. **Monthly Trend for total Orders:**

Helps identify peak months in terms of order volume

**Query** : select monthname(STR\_TO\_DATE(order\_date, '%Y-%m-%d')) as Month\_Name, COUNT(DISTINCT order\_id) as Total\_Orders

from pizza\_sales

GROUP BY monthname(STR\_TO\_DATE(order\_date, '%Y-%m-%d'))

**Output**

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***Sales Distribution by Category and Size***

1. **% of Sales by Pizza Category**

Shows which categories generate the highest percentage of sales.

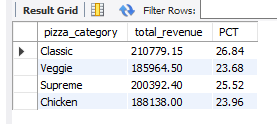
**Query** : SELECT pizza\_category, CAST(SUM(total\_price) AS DECIMAL(10,2)) as total\_revenue,

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

**Output**



1. **% of Sales by Pizza Size**

Provides insights into the revenue contribution of different pizza sizes.

**Query** : SELECT pizza\_size, CAST(SUM(total\_price) AS DECIMAL(10,2)) as total\_revenue,

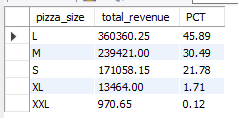
CAST(SUM(total\_price) \* 100 / (SELECT SUM(total\_price) from pizza\_sales) AS DECIMAL(10,2)) AS PCT

FROM pizza\_sales

GROUP BY pizza\_size

ORDER BY pizza\_size

**Output**



1. **Total Pizzas Sold by Pizza Category**

Highlights the best-selling pizzas by revenue and quantity, useful for inventory and promotional strategies.

**Query** SELECT pizza\_category, SUM(quantity) AS Total\_Quantity\_Sold

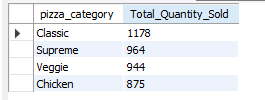
FROM pizza\_sales

WHERE MONTH(STR\_TO\_DATE(order\_date, '%Y-%m-%d')) = 2

GROUP BY pizza\_category

ORDER BY Total\_Quantity\_Sold DESC;

**Output**



1. **Top 5 Pizzas by Revenue**

Highlights the best-selling pizzas by revenue and quantity, useful for inventory and promotional strategies.

**Query** SELECT pizza\_name, SUM(total\_price) AS Total\_Revenue

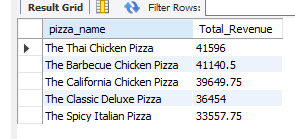
FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Revenue DESC

Limit 5

**Output**:



1. **Bottom 5 Pizzas by Revenue**

Identifies pizzas with low sales for potential adjustments or discontinuation.

**Query:** SELECT pizza\_name, SUM(total\_price) AS Total\_Revenue

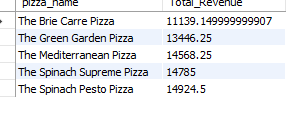
FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Revenue

Limit 5

**Output:**



1. **Top 5 Pizzas by Quantity**

Highlights the best-selling pizzas by revenue and quantity, useful for inventory and promotional strategies.

**Query:** SELECT pizza\_name, SUM(quantity) AS Total\_Pizza\_Sold

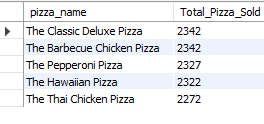
FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Pizza\_Sold DESC

limit 5

**Output**



1. **Bottom 5 Pizzas by Quantity**

Identifies pizzas with low sales for potential adjustments or discontinuation.

**Query** SELECT pizza\_name, SUM(quantity) AS Total\_Pizza\_Sold

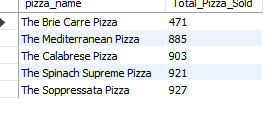
FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Pizza\_Sold

limit 5

**Output**



1. **Top 5 Pizzas by Total Orders**

Highlights the best-selling pizzas by revenue and quantity, useful for inventory and promotional strategies.

**Query:** SELECT pizza\_name, COUNT(DISTINCT order\_id) AS Total\_Orders

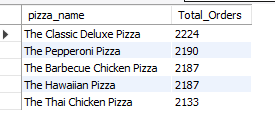
FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Orders DESC

limit 5

**Output**



1. **Bottom 5 Pizzas by Total Orders**

Identifies pizzas with low sales for potential adjustments or discontinuation.

**Query** SELECT pizza\_name, COUNT(DISTINCT order\_id) AS Total\_Orders

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Total\_Orders

limit 5

**Output**

