**SQL DATA EXPLORATION PROJECT**

In this project, the dataset from a Pizza company was explored in other to provide the solution to these 15 questions.

1. **Total Revenue** (The sum of the total price of all pizzas)
2. **Average Order** Value (The average amount spent per order, calculated by dividing the total revenue by the total number of orders)
3. **Total Pizzas Sold** (The sum of the quantities of all pizzas sold)
4. **Total Orders** (The total number of orders placed)
5. **Average Pizzas Per Order** (The average number of Pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders)
6. **Daily Trend for Total orders**
7. **Hourly Trend for Total Orders**
8. **Percentage of Sales by Pizza Category**
9. **Percentage of Sales by Pizza Category** (For only the Month of January)
10. **Percentage of Sales by Pizza Size**
11. **Percentage of Sales by Pizza Size** (For quarter of the year)
12. **Total Pizza Sold by Pizza Category**
13. **Top 5 Best Sellers by Total Pizzas Sold**
14. **Bottom 5 Worst Sellers by Total Pizzas Sold**
15. **Bottom 5 Worst Sellers by Total Pizzas Sold** (For only August)

**After this exploration analysis in SQL, the same data will be exported to Excel and Power BI to visualize the result.**

**--To check the entire file before starting the exploration**

SELECT \*

FROM pizza\_sales

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**1--Total Revenue (The sum of the total price of all pizzas)**

SELECT SUM(total\_price) Total\_Revenue

FROM pizza\_sales

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**2--Average Order Value (The average amount spent per order, calculated by dividing the total revenue by the total number of orders)**

SELECT SUM(total\_price)/ COUNT(DISTINCT order\_id) Avg\_Order\_Value

FROM pizza\_sales

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**3--Total Pizzas Sold (The sum of the quantities of all pizzas sold)**

SELECT SUM(quantity) Total\_Pizzas\_Sold

FROM pizza\_sales

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**4--Total Orders (The total number of orders placed)**

SELECT COUNT(DISTINCT order\_id) Total\_Orders

FROM pizza\_sales

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**5--Average Pizzas Per Order (The average number of Pizzas sold per order, calculated by dividing the total number of pizzas sold by the total number of orders)**

SELECT CAST(SUM(quantity) / COUNT(DISTINCT order\_id) AS DECIMAL(10,2)) Average\_Pizzas\_Per\_Order

FROM pizza\_sales

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**6--Daily Trend for Total orders**

SELECT DATENAME(DW, order\_date) as Order\_Day, COUNT(DISTINCT order\_id) as Total\_orders

FROM pizza\_sales

GROUP BY DATENAME(DW, order\_date)

ORDER BY Total\_orders DESC

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**7--Hourly Trend for Total Orders**

SELECT DATEPART(HOUR, order\_time) as Order\_hours, COUNT(DISTINCT order\_id) as Total\_orders

FROM pizza\_sales

GROUP BY DATEPART(HOUR, order\_time)

ORDER BY DATEPART(HOUR, order\_time)

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**8--Percentage of Sales by Pizza Category**

SELECT pizza\_category, CAST(SUM(total\_price)\*100 / (SELECT sum(total\_price) from pizza\_sales)AS DECIMAL(10)) AS Total\_Sale\_Percentage

FROM pizza\_sales

GROUP BY pizza\_category

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**9--Percentage of Sales by Pizza Category (For only the Month of January)**

SELECT pizza\_category, SUM(total\_price)\*100 / (SELECT sum(total\_price) from pizza\_sales WHERE MONTH(order\_date) = 1) AS January\_Sale\_Percentage

FROM pizza\_sales

WHERE MONTH(order\_date) = 1

GROUP BY pizza\_category

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**10--Percentage of Sales by Pizza Size**

SELECT pizza\_size, CAST(SUM(total\_price)\*100 / (SELECT sum(total\_price) from pizza\_sales) AS DECIMAL (10,2)) AS Quarter\_Sale\_Percentage

FROM pizza\_sales

GROUP BY pizza\_size

ORDER BY Quarter\_Sale\_Percentage DESC

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**11--Percentage of Sales by Pizza Size (For quarter of the year)**

SELECT pizza\_size, CAST(SUM(total\_price)\*100 / (SELECT sum(total\_price) from pizza\_sales WHERE DATEPART(QUARTER, order\_date)=1) AS DECIMAL (10,2)) AS Quarter\_Sale\_Percentage

FROM pizza\_sales

WHERE DATEPART(QUARTER, order\_date)=1

GROUP BY pizza\_size

ORDER BY Quarter\_Sale\_Percentage DESC

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**12--Total Pizza Sold by Pizza Category**

SELECT pizza\_category, SUM(quantity) AS Total\_Pizzas\_Sold

FROM pizza\_sales

GROUP BY pizza\_category

ORDER BY Total\_Pizzas\_Sold DESC

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**13--Top 5 Best Sellers by Total Pizzas Sold**

SELECT TOP 5 pizza\_name, SUM(quantity) as Top5\_Pizzas\_Sold

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Top5\_Pizzas\_Sold DESC

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**14--Bottom 5 Worst Sellers by Total Pizzas Sold**

SELECT TOP 5 pizza\_name, SUM(quantity) as Bottom5\_Pizzas\_Sold

FROM pizza\_sales

GROUP BY pizza\_name

ORDER BY Bottom5\_Pizzas\_Sold ASC

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**15--Bottom 5 Worst Sellers by Total Pizzas Sold (For only August)**

SELECT TOP 5 pizza\_name, SUM(quantity) as August\_Bottom5\_Pizzas\_Sold

FROM pizza\_sales

WHERE MONTH(order\_date) = 8

GROUP BY pizza\_name

ORDER BY August\_Bottom5\_Pizzas\_Sold ASC

A screenshot of a menu

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