PIZZA SALES (SQL Report)

Problem Statement:

KPI's requirement:

We need to analyze key indicators for pizza sales data to gain insights into business performance. Specifically, need to calculate the following matrics:

1. **Total Revenue:** The sum of the total price of all pizza orders.
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.

Charts Requirement:

We will visualize various aspects of our pizza sales data to gain insights and understand key trends. We have identified the following requirements for creating charts:

1. **Daily Trend for total orders:**
   Create a **'bar chart'** that displays the daily trend of total orders over a specific time period. This chart will help us identify any patterns or fluctuations in order volumes on a daily basis.
2. **Hourly trend for total Orders:**
   Create a **'line chart'** that illustrates the hourly trend of total orders thoroughly the day. This chart will allow us to identify peak hours or periods of high order activity.
3. **Percentage of Sales by Pizza Category:**
   Create a **'pie chart'** the shows the distribution of sales across different pizza categories. This chart will provide insights into the popularity of various pizza categories and their contribution to overall sales.
4. **Percentage of Sales by Pizza Size:**
   Generate a **'pie chart'** that represents the percentage of sales attributed to different pizza sizes. This chart will help us understand customer preferences for pizza sizes and their impact on sales.
5. **Total Pizza sold by Pizza Category:**
   Create a **'funnel chart'** that represents the total number of pizzas sold for each pizza category. This chart will allow us to compare the sales performance of different pizza categories.
6. **Top 5 Best Sellers by Total Pizza sold:**
   Create a **'bar chart'** highlighting the top 5 best-selling pizzas on the total number of pizzas sold. This chart will help us identify the most popular pizza options.

7. **Bottom 5 Worst sellers by total pizzas sold:**
   Create a **'bar chart'** showcasing the bottom 5 worst-selling pizzas based on the total number of pizzas sold. This chart will enable us to identify underperforming or less popular pizza options.

Software used:

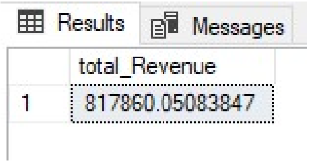
MS Excel
Microsoft SQL Server Management Studio

Pizza sales SQL queries:

A. KPI's:

1. **Total Revenue:**

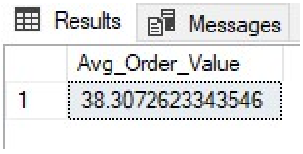
```
CREATE DATABASE PizzaDB
select * from pizza_sales
Select SUM(total_price) AS total_Revenue from pizza_sales
```



	total_Revenue
1	817860.05083847

2. **Average Order Value:**

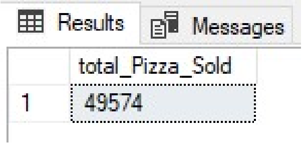
```
select sum(total_price) / count(distinct order_id) as Avg_Order_Value from pizza_sales
```



	Avg_Order_Value
1	38.3072623343546

3. **Total Pizzas Sold:**

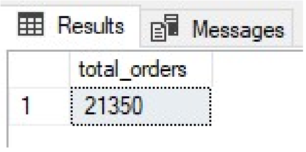
```
select sum(quantity) AS total_Pizza_Sold from pizza_sales
```



	total_Pizza_Sold
1	49574

4. **Total Orders:**

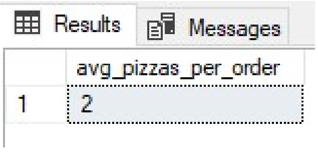
```
select count(distinct order_id) AS total_orders from pizza_sales
```



	total_orders
1	21350

5. **Average Pizzas per Order:**

```
select sum(quantity) / count(distinct order_id) as avg_pizzas_per_order from
pizza_sales
```

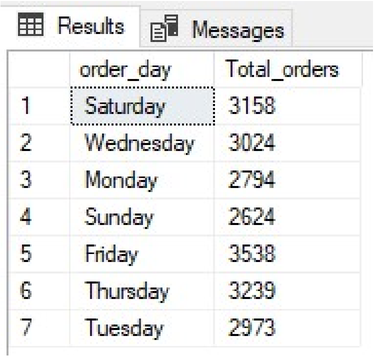


	avg_pizzas_per_order
1	2

B. Charts Requirement:

1. **Daily Trend for total orders:**

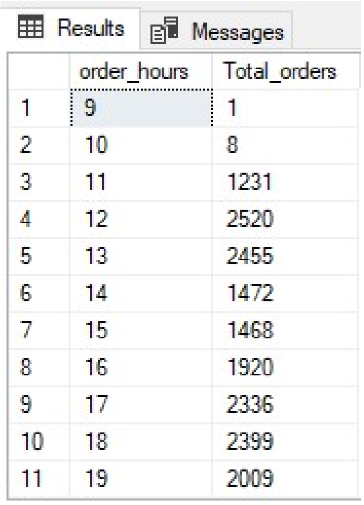
```
select DATENAME(DW, order_date) as order_day, COUNT (distinct order_id) as Total_orders
from pizza_sales
group by DATENAME (DW, order_date)
```



	order_day	Total_orders
1	Saturday	3158
2	Wednesday	3024
3	Monday	2794
4	Sunday	2624
5	Friday	3538
6	Thursday	3239
7	Tuesday	2973

2. Hourly trend for total Orders:

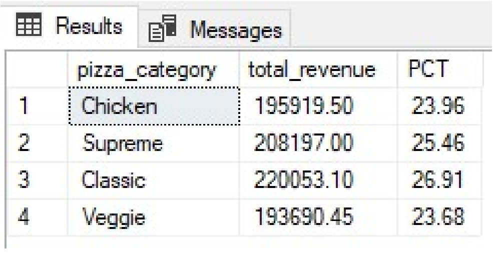
```
select DATEPART(HOUR, order_time) as order_hours, COUNT (distinct order_id) as
Total_orders
from pizza_sales
group by DATEPART(HOUR, order_time)
ORDER BY DATEPART(HOUR, order_time)
```



	order_hours	Total_orders
1	9	1
2	10	8
3	11	1231
4	12	2520
5	13	2455
6	14	1472
7	15	1468
8	16	1920
9	17	2336
10	18	2399
11	19	2009

3. Percentage of Sales by Pizza Category:

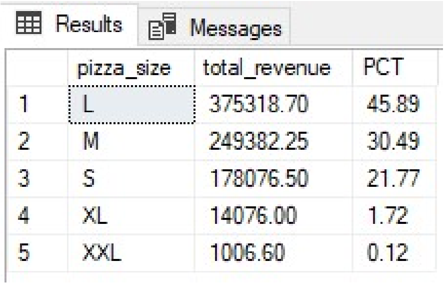
```
SELECT pizza_category, CAST(SUM(total_price) AS DECIMAL(10,2)) as total_revenue,
CAST(SUM(total_price) * 100 / (SELECT SUM(total_price) from pizza_sales) AS
DECIMAL(10,2)) AS PCT                    # PCT is percentage of total
FROM pizza_sales
GROUP BY pizza_category
```



	pizza_category	total_revenue	PCT
1	Chicken	195919.50	23.96
2	Supreme	208197.00	25.46
3	Classic	220053.10	26.91
4	Veggie	193690.45	23.68

4. **Percentage of Sales by Pizza Size:**

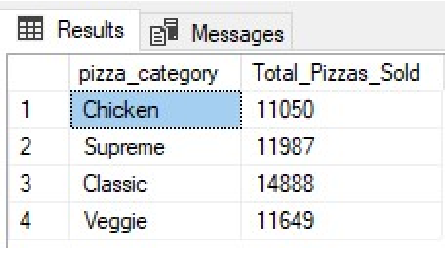
```
SELECT pizza_size, CAST(SUM(total_price) AS DECIMAL(10,2)) as total_revenue,
CAST(SUM(total_price) * 100 / (SELECT SUM(total_price) from pizza_sales) AS
DECIMAL(10,2)) AS PCT
FROM pizza_sales
GROUP BY pizza_size
ORDER BY pizza_size
```



	pizza_size	total_revenue	PCT
1	L	375318.70	45.89
2	M	249382.25	30.49
3	S	178076.50	21.77
4	XL	14076.00	1.72
5	XXL	1006.60	0.12

5. **Total Pizza sold by Pizza Category:**

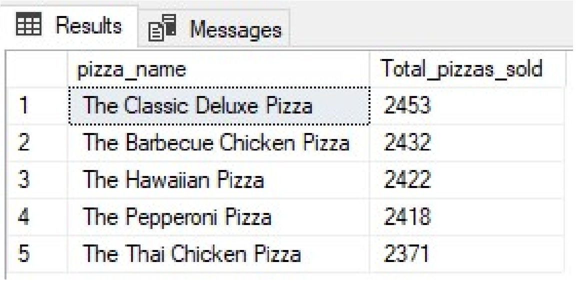
```
select pizza_category, SUM(quantity) as Total_Pizzas_Sold
from pizza_sales
Group by pizza_category
```



	pizza_category	Total_Pizzas_Sold
1	Chicken	11050
2	Supreme	11987
3	Classic	14888
4	Veggie	11649

6. **Top 5 Best Sellers by Total Pizza sold:**

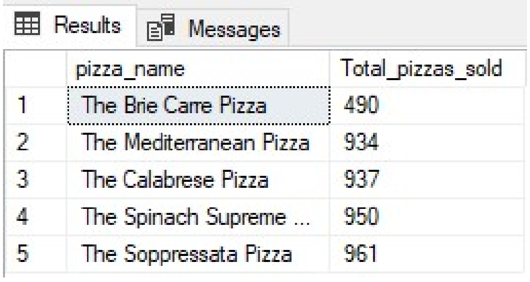
```
select TOP 5 pizza_name, sum(quantity) as Total_pizzas_sold
from pizza_sales
GROUP BY pizza_name
ORDER BY sum (quantity) DESC
```



	pizza_name	Total_pizzas_sold
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

7. Bottom 5 Worst sellers by total pizzas sold:

```
select TOP 5 pizza_name, sum(quantity) as Total_pizzas_sold
from pizza_sales
GROUP BY pizza_name
ORDER BY sum (quantity) ASC
```



	pizza_name	Total_pizzas_sold
1	The Brie Carre Pizza	490
2	The Mediterranean Pizza	934
3	The Calabrese Pizza	937
4	The Spinach Supreme ...	950
5	The Soppressata Pizza	961