**PIZZA SALES INSIGHTS-DASHBOARD**

**Overview:**

This project focuses on analyzing pizza sales data to understand sales performance, customer demand, and product trends.  
It demonstrates an end-to-end data analysis process, from raw data handling to building an interactive dashboard for business insights.

The goal is to help stakeholders make better decisions related to sales strategy, product popularity, and revenue optimization.

**📂 Dataset:**

* Source: Excel file (.xlsx)
* Type: Transactional sales data
* Key fields include:
  + Order ID
  + Order Date & Time
  + Pizza Name
  + Pizza Category & Size
  + Quantity Sold
  + Unit Price
  + Total Sales Amount

**🛠 Tools & Technologies:**

* **Microsoft Excel** – Data loading and cleaning
* **MySQL** – Database storage and SQL analysis
* **SQL** – Querying, aggregations, and trend analysis
* **Power BI** – Interactive dashboard and visualizations

**Phases of project:**

**1️⃣ Data Loading**

**Imported raw pizza sales data from Excel**

**Checked data structure and column consistency**

**Data Cleaning (Excel)**

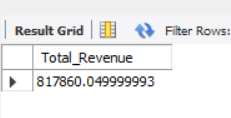
* Removed duplicate records
* Handled missing or incorrect values
* Standardized date and time formats
* Ensured correct data types for numeric fields

**Data Analysis using SQL query:**

**A.KPI’s:-**

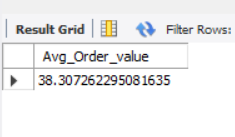
**1.Total Revenue:-**

**\*\***select sum(total\_price) AS Total\_Revenue from pizza\_sales



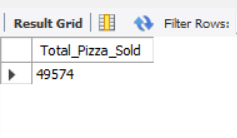
**2.Average Order Value**

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



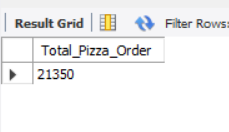
**3.Total Pizzas Sold**

**\*\*** **select sum(quantity) as Total\_Pizza\_Sold from pizza\_sales**

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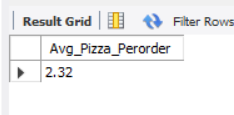
**4.Total Pizzas Order**

\*\*select count(distinct order\_id) as Total\_Pizza\_Order from pizza\_sales

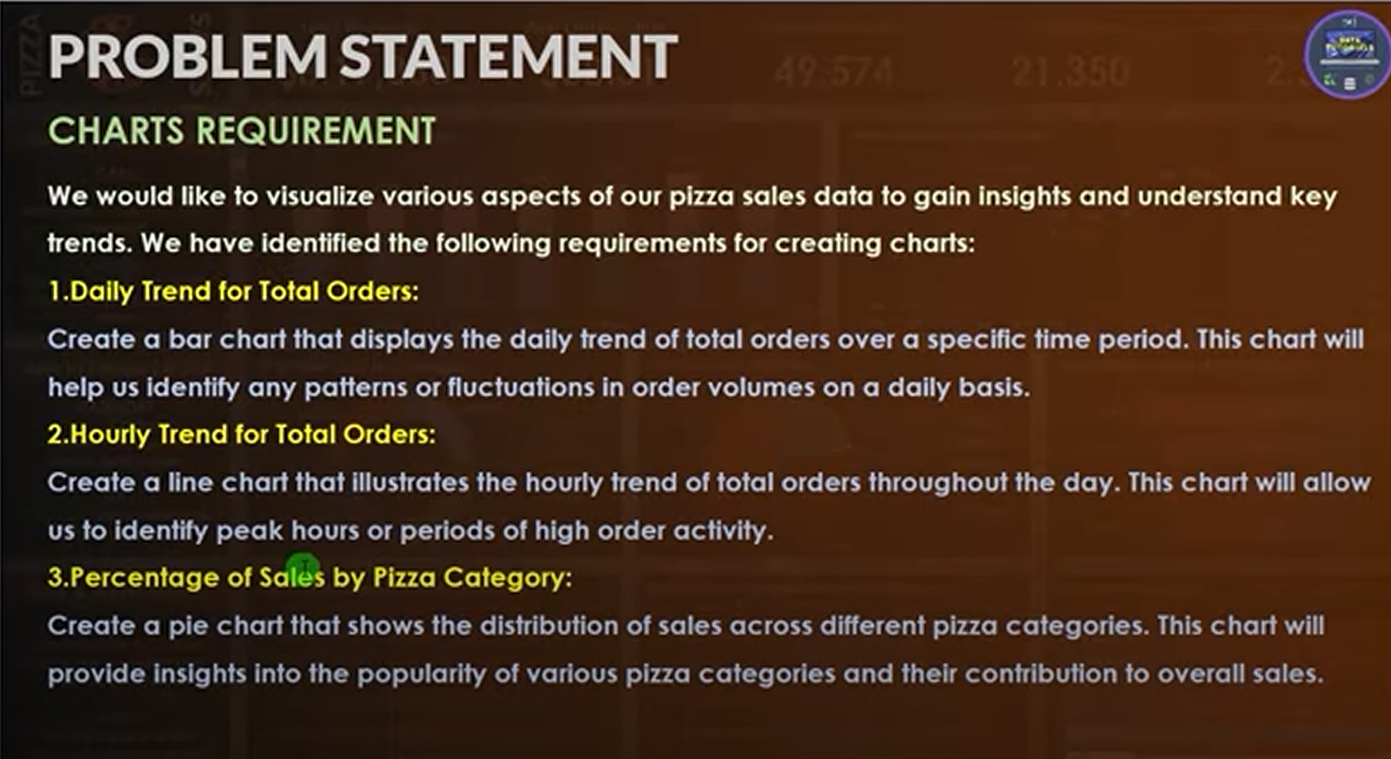


**4.Avg\_Pizzas Per Order**

\*\*select cast(cast(sum(quantity) as decimal(10,2)) /cast(count(distinct order\_id) as decimal(10,2)) as decimal(10,2)) as Avg\_Pizza\_Perorder from pizza\_sales



**B.Charts Requirement:-**

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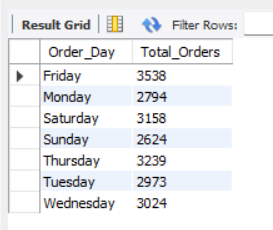
**1.Daily Trend for Total Orders:**

**\*\***select Dayname(str\_to\_date(order\_date,'%d-%m-%Y')) as Order\_Day ,

count(distinct order\_id) as Total\_Orders

from pizza\_sales

group by Dayname(str\_to\_date(order\_date,'%d-%m-%Y'));

****

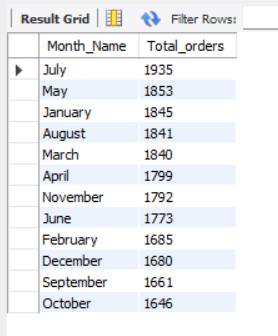
**2.Hourly Trend for TotalOrders:**

select monthname(str\_to\_date(order\_date,'%d-%m-%Y')) as Month\_Name, count(distinct order\_id) as Total\_orders

from pizza\_sales

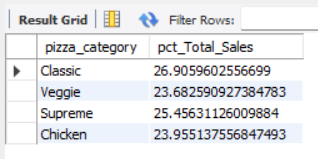
group by monthname(str\_to\_date(order\_date,'%d-%m-%Y'))

order by Total\_orders desc;



**3.Percentage of Sales by Pizza Category:**

* select pizza\_category,sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales) as pct\_Total\_Sales
* from pizza\_sales
* group by pizza\_category;



----**ORDERS OF HIGHEST CATEGORY OF PIZZA**------------------------------------------------------------------------

select pizza\_category,sum(total\_price) as Total\_sales,sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales where monthname(str\_to\_date(order\_date,'%d-%m-%Y')) = 'January') as pct\_Total\_Sales

from pizza\_sales

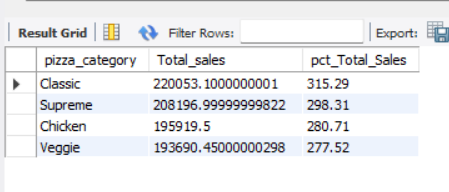
group by pizza\_category

select pizza\_category,sum(total\_price) as Total\_sales,CAST(sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales where monthname(str\_to\_date(order\_date,'%d-%m-%Y')) = 'January') AS DECIMAL(10,2))as pct\_Total\_Sales

from pizza\_sales

group by pizza\_category

ORDER BY pct\_Total\_Sales desc ;

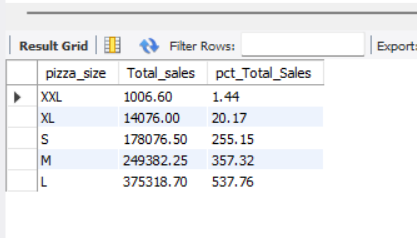
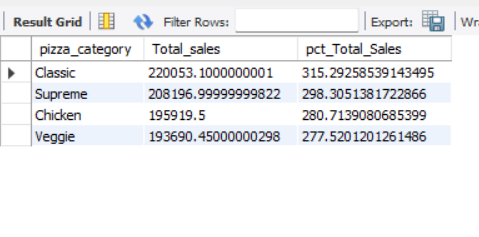


select pizza\_size,cast(sum(total\_price) as decimal(10,2)) as Total\_sales,CAST(sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales where monthname(str\_to\_date(order\_date,'%d-%m-%Y')) = 'January') AS DECIMAL(10,2))as pct\_Total\_Sales

from pizza\_sales

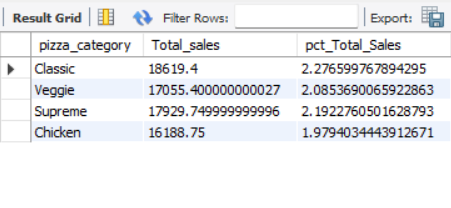
group by pizza\_size

order by pct\_Total\_Sales;

* ORDER BY pct\_Total\_Sales desc ;
* 
* 

**----EXAMPLES----**Sales only in month of January

* select pizza\_category,sum(total\_price) as Total\_sales,sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales) as pct\_Total\_Sales
* from pizza\_sales
* where monthname(str\_to\_date(order\_date,'%d-%m-%Y')) = 'January'
* group by pizza\_category;

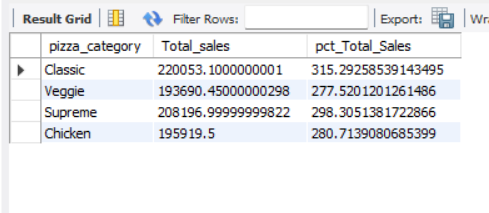


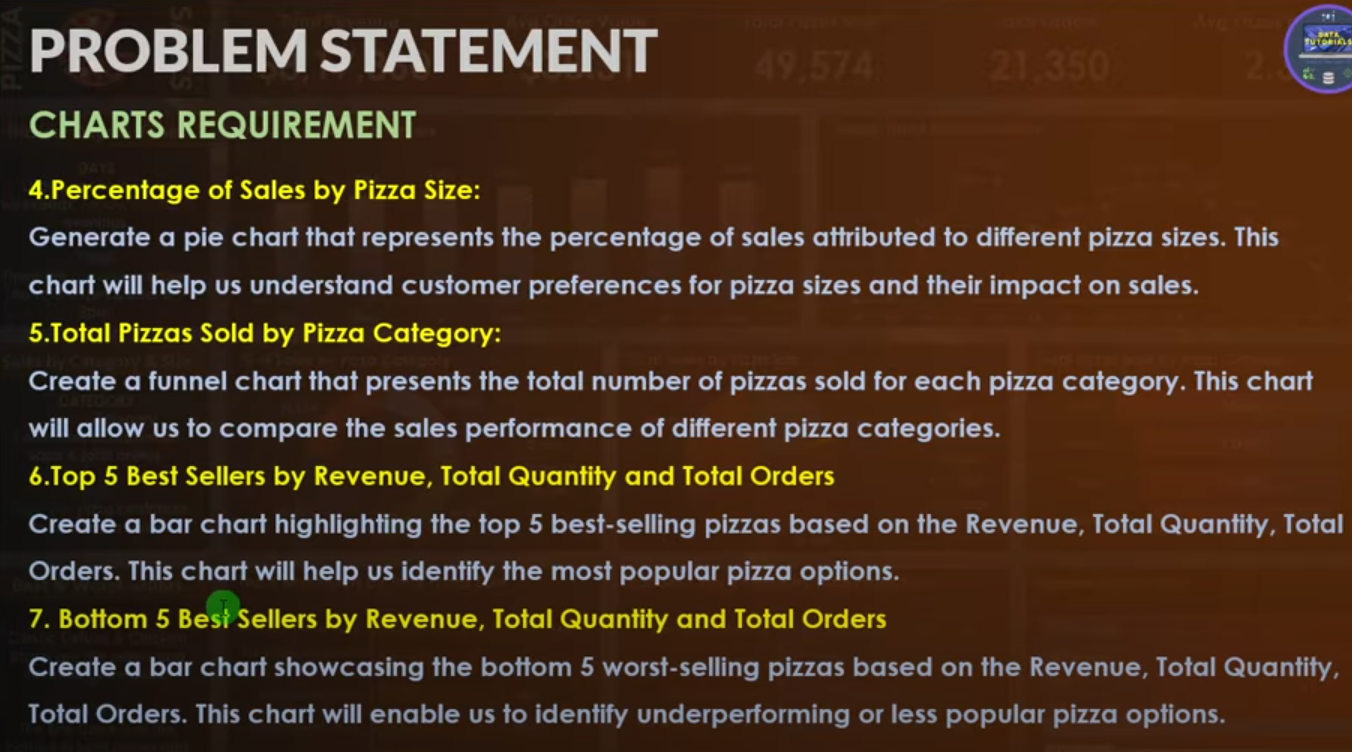
------Where clause should use with subquery

select pizza\_category,sum(total\_price) as Total\_sales,sum(total\_price)\*100/ (select sum(total\_price) from pizza\_sales where monthname(str\_to\_date(order\_date,'%d-%m-%Y')) = 'January') as pct\_Total\_Sales

from pizza\_sales

* + **group by pizza\_category;**





6.**Top 5 Best sellers by revenue(total\_sales),total quantity and total orders**

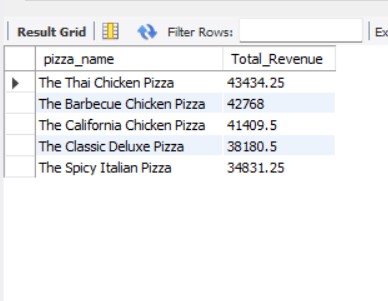
**select pizza\_name,sum(total\_price) as Total\_Revenue**

**from pizza\_sales**

**group by pizza\_name**

**order by Total\_Revenue desc**

**limit 5;**

****

**Bottom 5 -------**

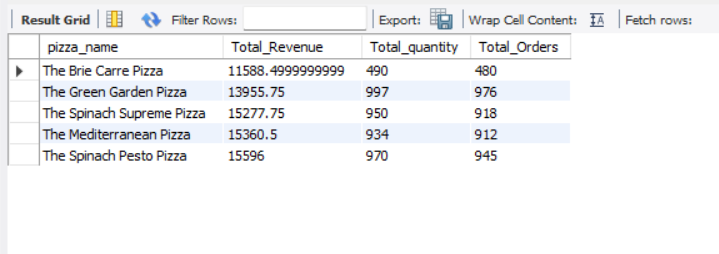
**select pizza\_name,sum(total\_price) as Total\_Revenue,sum(quantity) as Total\_quantity,count( distinct order\_id) as Total\_Orders**

**from pizza\_sales**

**group by pizza\_name**

**order by Total\_Revenue ,Total\_quantity,Total\_Orders asc**

**limit 5;**

****

Powerbi query

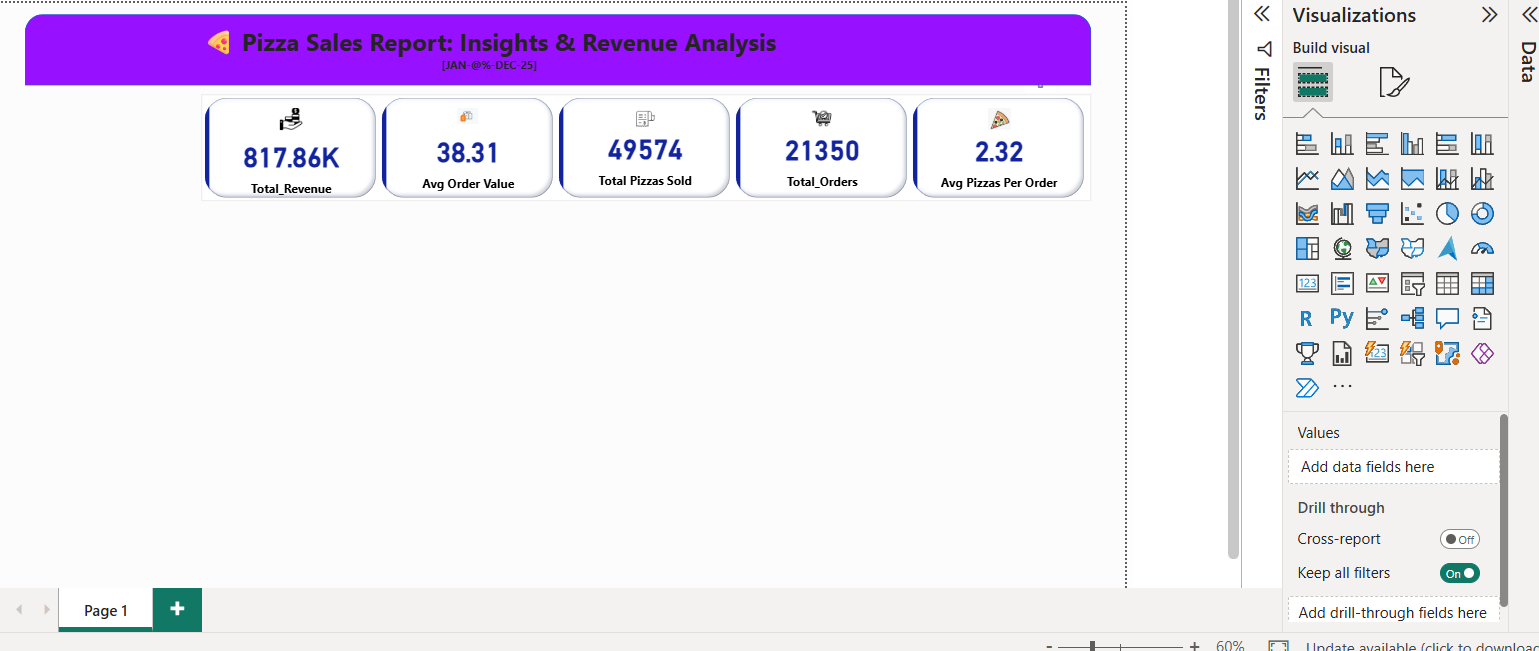
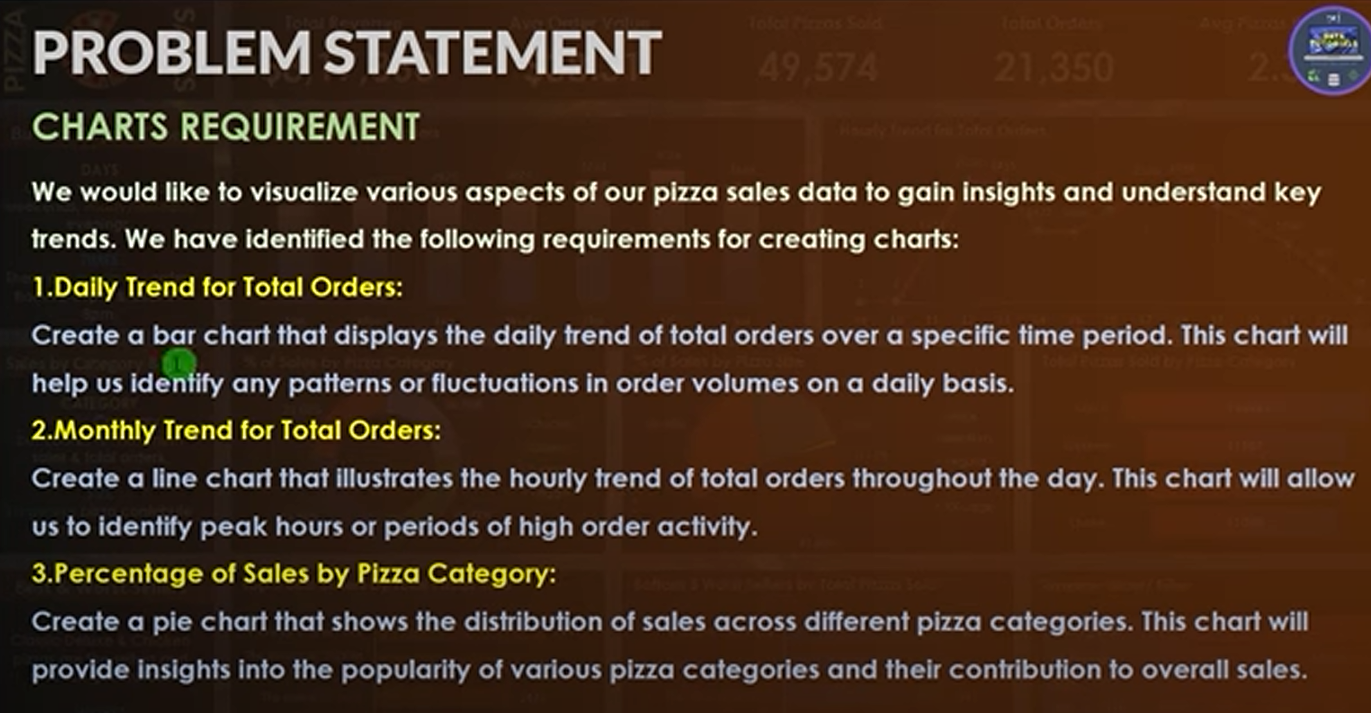
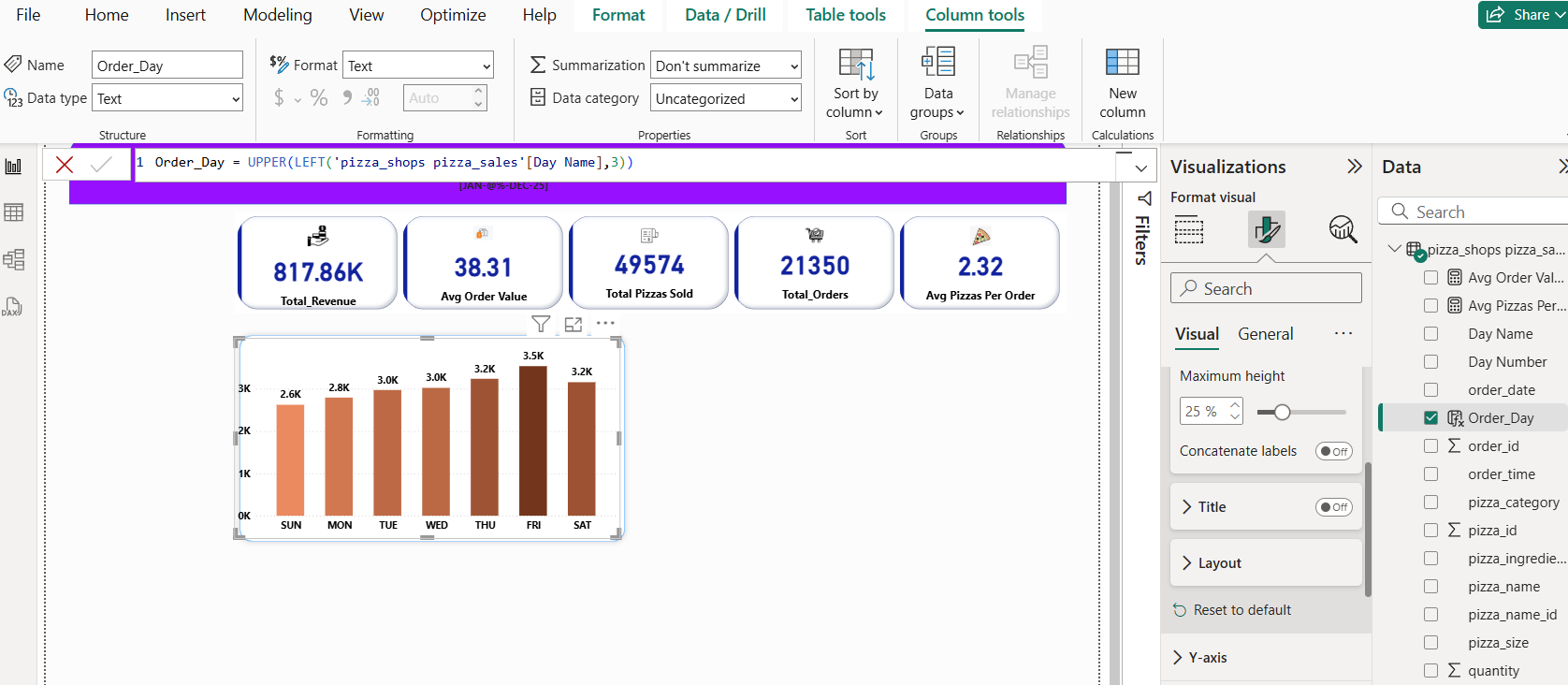
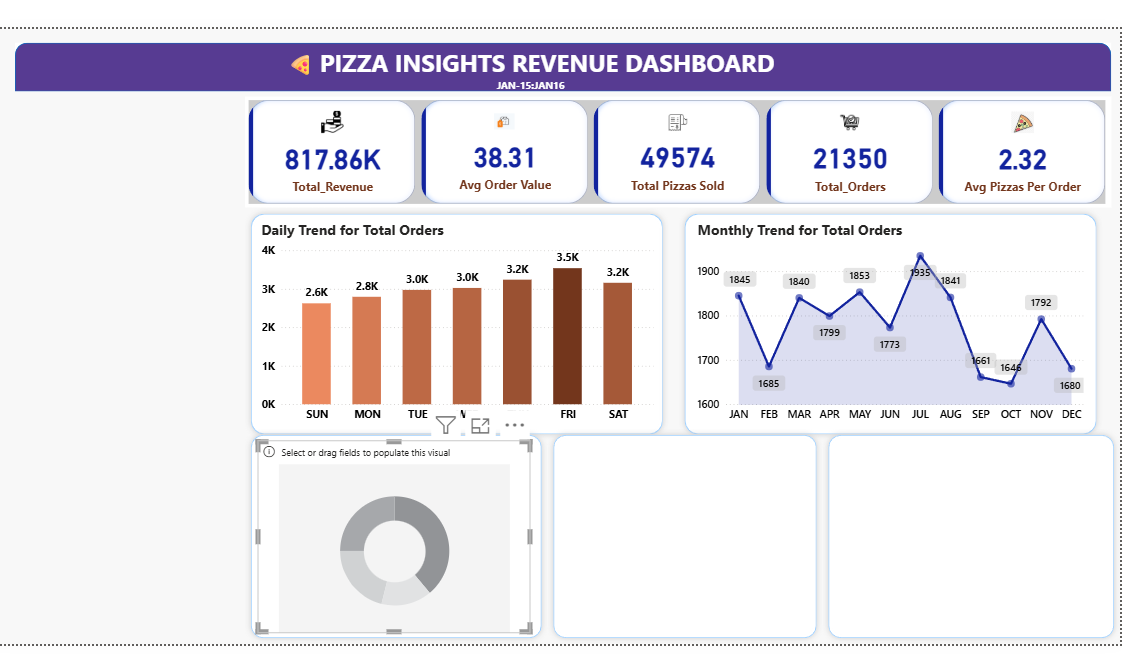
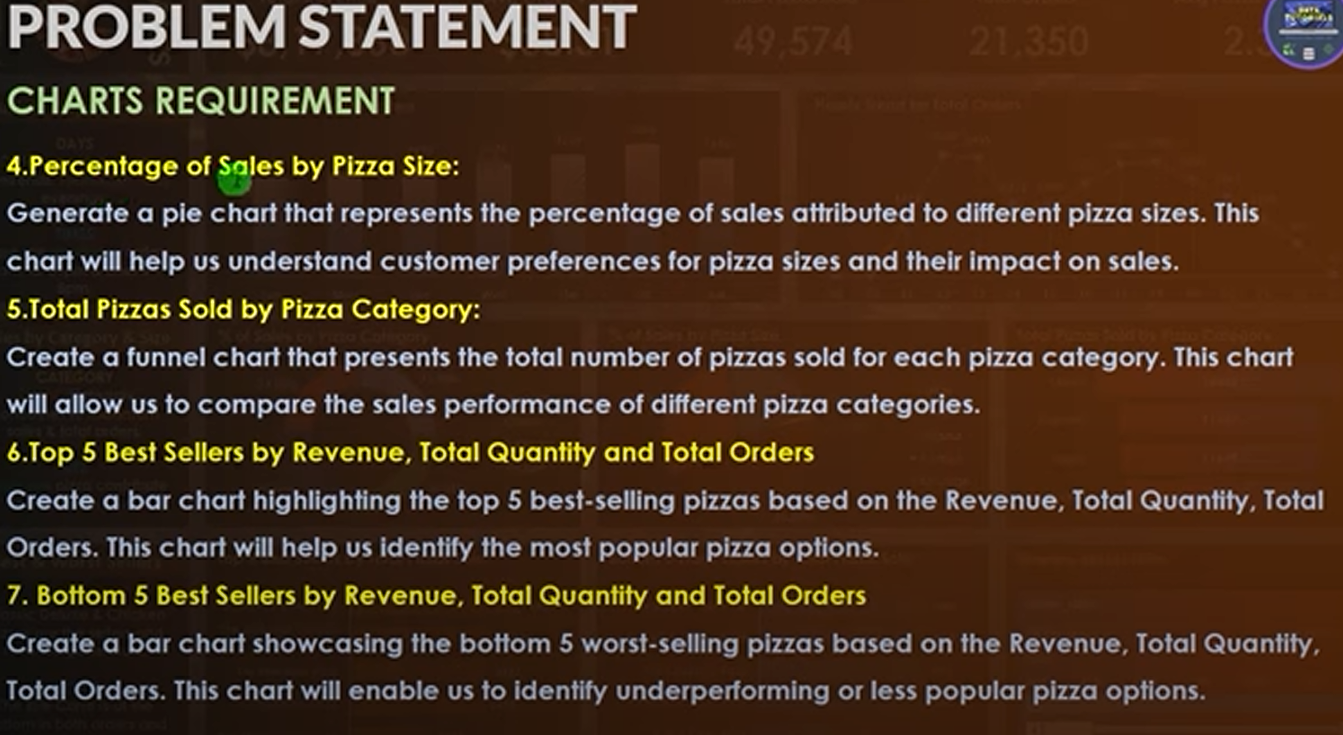
B.EDA

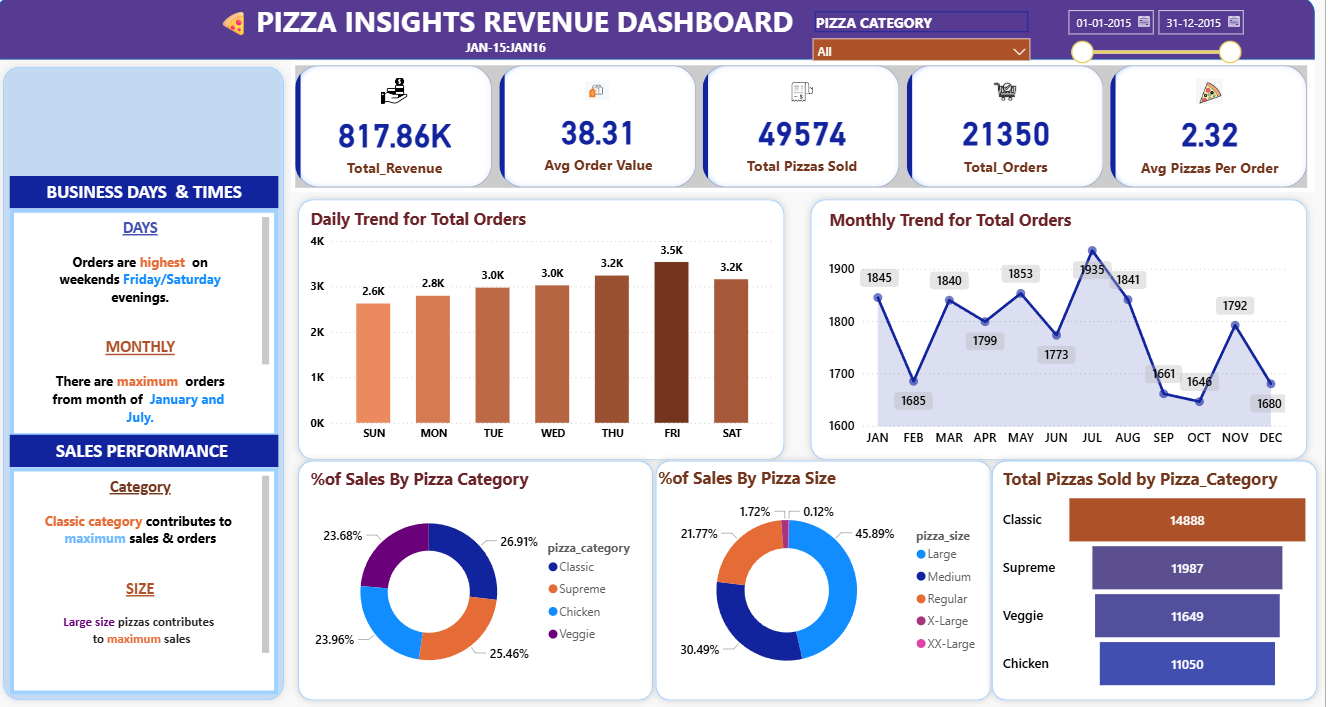
1.Load data from mysql database

2.Data Cleaning

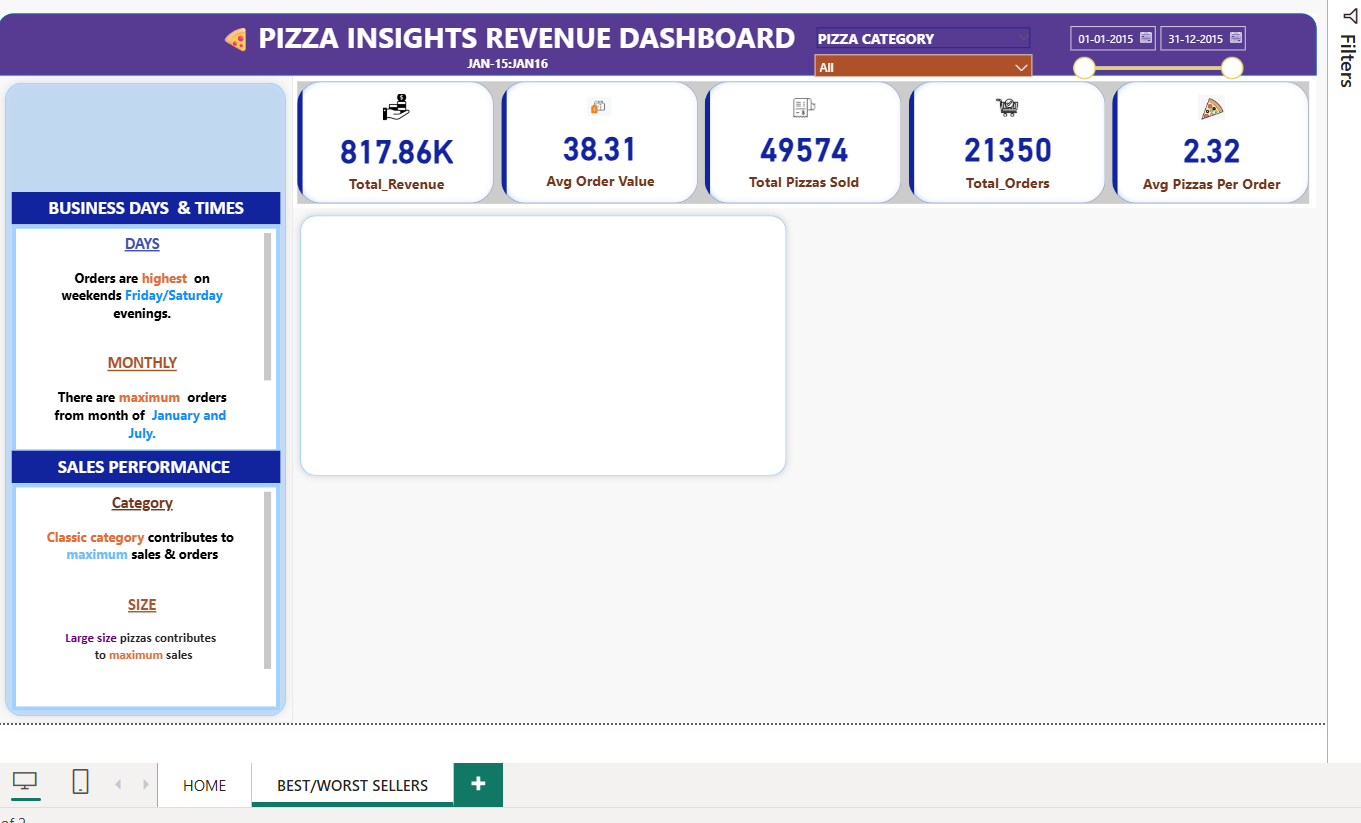
* Pizza size-L,M,XXL---gives full name
* **Home-transform data-power query**
* **Select-pizza\_size-right click-replace values [L-Large,M-Medium,XL-X-Large…**
* **Close and apply**

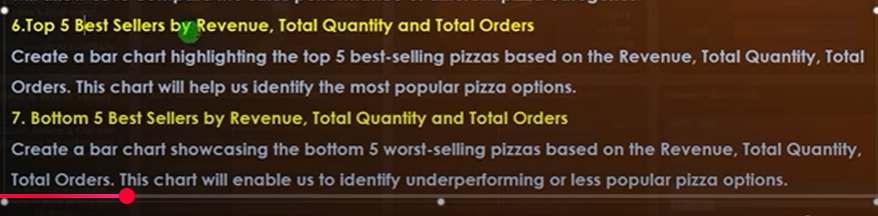


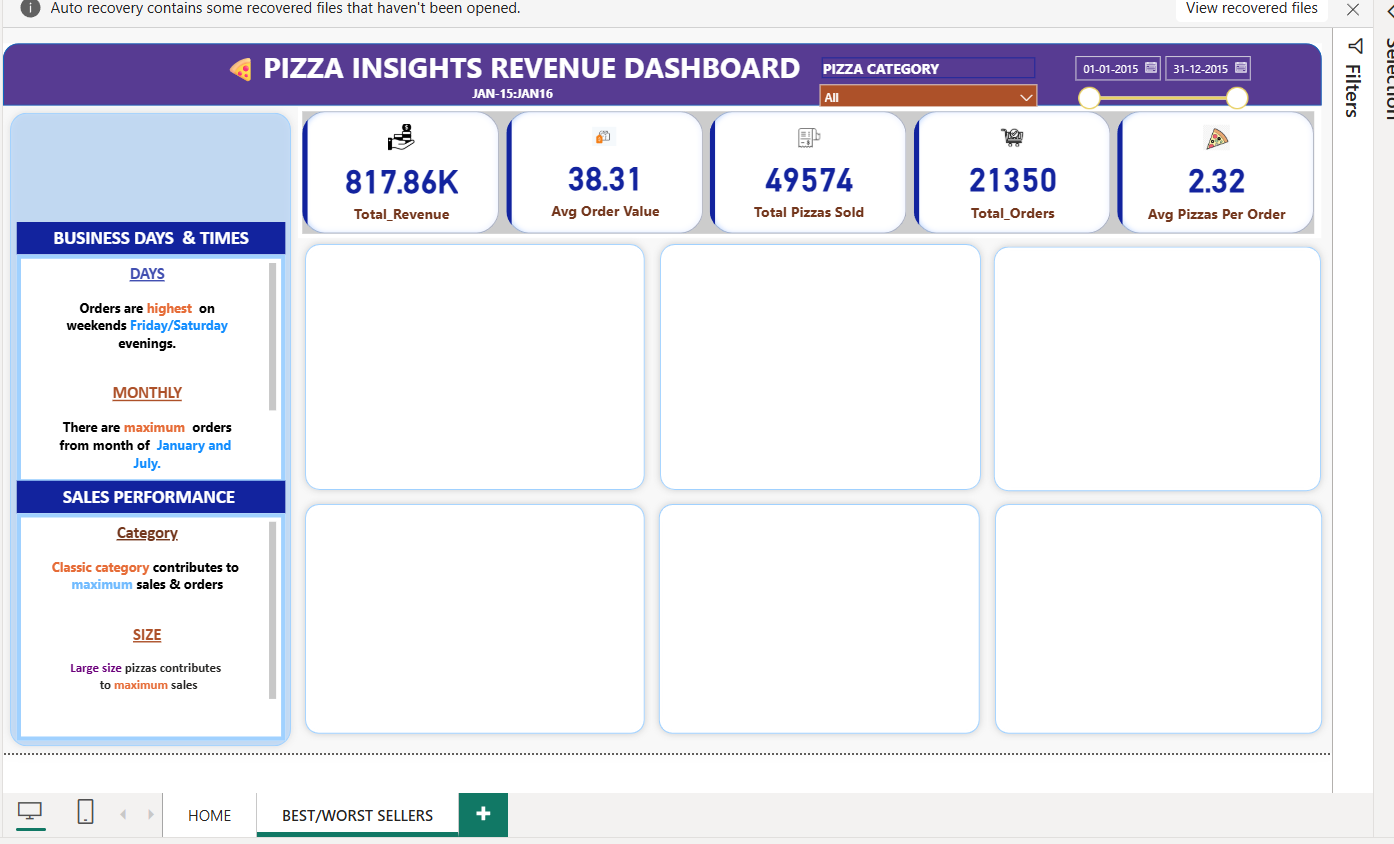
* USE DAX FUNCTION
* RIGHT CLICK ON ANY ATTRIBUTE-MEASURE
* **1.Total\_Revenue = sum( 'pizza\_shops pizza\_sales'[total\_price])**
* **4.Total\_Orders = DISTINCTCOUNT( 'pizza\_shops pizza\_sales'[order\_id])**
* **2.Avg Order Value = [Total\_Revenue]/[Total\_Orders]**
* **3.Total Pizzas Sold = sum('pizza\_shops pizza\_sales'[quantity])**
* **5.** **Avg Pizzas Per Order= [Total Pizzas Sold]/[Total\_Orders]**
* Go to Visuals-New Card-Create KPI
* 
* Create Charts
* 
* 
* 
* Total Revenue by pizza category
* X-axis-Pizza category
* Y-axis-Total revenue
* Total Revenue by pizza Size
* X-axis-Pizza Size
* Y-axis-Total revenue
* ----rotation -2%
* 
* % of sales by pizza sale
* X-axis-
* Y-axis-



---------------------------------------------------------------------------NEXT PAGE-BEST/WORST SELLERS





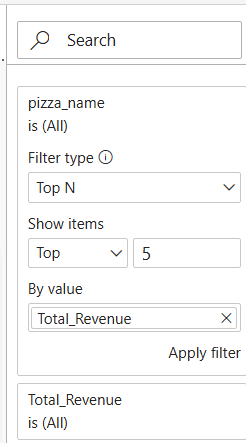


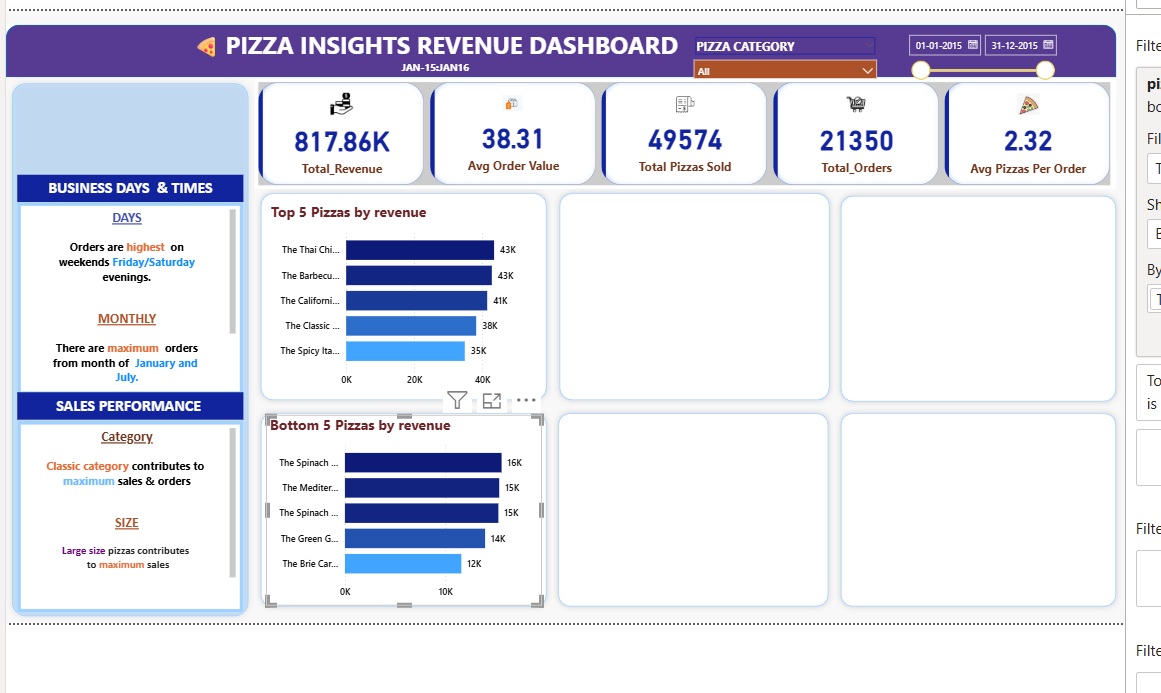
--TOTAL SELLERS BY REVENUE

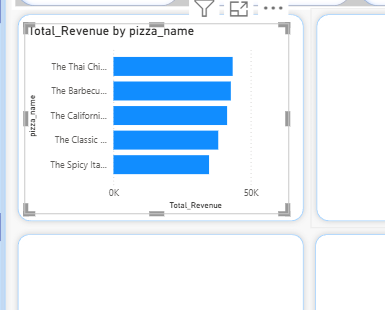
---BAR CHART

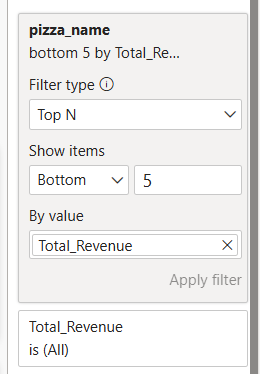
X-AXIS=PIZZA NAME,Y-AXIS==TOTAL REVENUE

FILTER SECTION

 APPLY FILTER







**Business Recommendation:**

1. **Focus on Top-Selling Pizzas:** Use top performers as anchor products to increase overall order value.
2. **Improve Low-Performing Pizzas:** Review pricing, ingredients, or visibility of low-selling pizzas.
3. **Leverage Pizza Size & Category Insights:** Adjust pricing strategy for sizes that generate higher margins.
4. **Data-Driven Inventory Planning:** Reduce food waste by aligning procurement with actual demand.
5. **Use Dashboard for Ongoing Monitoring:** Track daily revenue and order volume using KPI cards.