**ECOMMERCE SALES DATA**

**DATA VALIDATION**

OBJECTIVE: Data Validation of Visuals in Power Bi Dashboard

of Ecommerce Sales.

**--Prerequisites and Data cleaning**

**USE** ecommerce;

**SELECT** \* **FROM** ecommerce\_data;

**DESC** ecommerce\_data;

**-- Changing datatype for orderdate and ship date**

**SET** sql\_safe\_updates=0;

**UPDATE** ecommerce\_data

**SET** order\_date = date\_format(str\_to\_date(order\_date,'%d-%m-%Y'),'%Y-%m-%d');

**ALTER TABLE** ecommerce\_data

**MODIFY** order\_date DATE;

**UPDATE** ecommerce\_data

**SET** ship\_date = date\_format(str\_to\_date(ship\_date,'%d-%m-%Y'),'%Y-%m-%d');

**ALTER TABLE** ecommerce\_data

**MODIFY** ship\_date DATE;

**KPI**

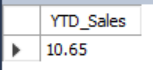
**-- YTD Sales**

**SELECT** ROUND(SUM( sales\_per\_order) /1000000,2) **AS** YTD\_Sales

**FROM** ecommerce\_data

**WHERE** **YEAR**(order\_date) = 2022;

Output:

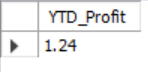


**--** **YTD Profit**

**SELECT** ROUND(SUM(profit\_per\_order ) /1000000,2) **AS** YTD\_Sales

**FROM** ecommerce\_data

**WHERE** **YEAR**(order\_date) = 2022;

Output:

**-- YTD Quantity Sold**

**SELECT** ROUND(SUM(order\_quantity ) /1000,1) **AS** YTD\_Sales

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022;

Output:



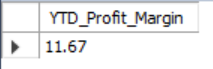
**-- YTD Profit Margin**

**SELECT** ROUND((SUM(profit\_per\_order ) / SUM( sales\_per\_order)) \* 100,2) **AS** YTD\_Profit\_Margin

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022;

Output:



**MATRIX VISUAL**

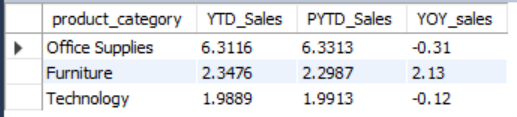
**-- YTD Sales, PYTD Sales , YOY Sales by Product category**

**WITH** ct1 **AS** (

**SELECT** category\_name **AS** product\_category,

**ROUND**(SUM( sales\_per\_order) /1000000,4) **AS** YTD\_Sales

**FROM** ecommerce\_data Output:

 **WHERE** **YEAR**(order\_date) = 2022

**GROUP BY** 1),

ct2 **AS** (

**SELECT** category\_name **AS** product\_category,

**ROUND**(**SUM**( sales\_per\_order) /1000000,4) **AS** PYTD\_Sales

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2021

**GROUP BY** 1

**ORDER BY** 2 DESC)

**SELECT** ct1.product\_category, ct1.YTD\_Sales,ct2.PYTD\_Sales ,

**ROUND**(((ct1.YTD\_Sales-ct2.PYTD\_Sales) / ct2.PYTD\_Sales )\* 100,2) **AS** YOY\_sales

**FROM** ct1,ct2

**WHERE** ct1.product\_category=ct2.product\_category

**GROUP BY** 1;

**BAR CHART**

**-- Top 5 Products by YTD Sales**

**SELECT** product\_name, **ROUND**(**SUM**(sales\_per\_order)/1000,0) **AS** sales

**FROM** ecommerce\_data

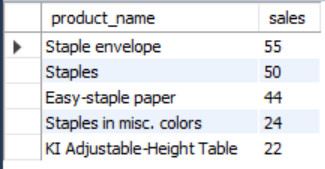
**WHERE YEAR**(order\_date) = 2022

**GROUP BY** 1

**ORDER BY** 2 DESC

**LIMIT** 5;

Output:



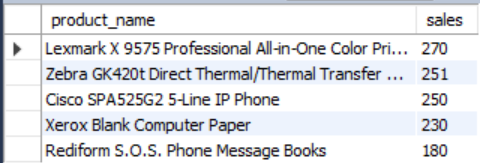
**-- Bottom 5 Products by YTD Sales**

**SELECT** \* **FROM**(

**SELECT** product\_name,**ROUND**(**SUM**(sales\_per\_order),0) AS sales

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022

**GROUP BY** 1 Output:

**ORDER BY** 2 ASC

**LIMIT** 5 ) **AS** bottom\_sales

**ORDER BY** sales DESC;

**DONUT CHARTS**

**-- YTD Sales by region**

**SELECT** customer\_region **AS** region,

**SUM**(sales\_per\_order) **AS** sales,

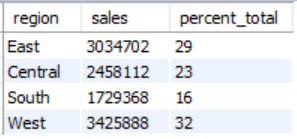
**ROUND**( **SUM**(sales\_per\_order)/ (**SELECT** **SUM**(sales\_per\_order) **FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022) \*100,0) **AS** percent\_total

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022

**GROUP BY** 1;

Output:

**-- YTD Sales by shipping mode**

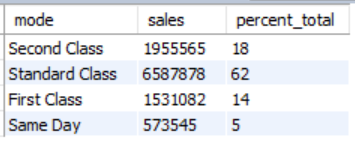
**SELECT** shipping\_type **AS** mode, **SUM(**sales\_per\_order**) AS** sales**,**

**ROUND**( **SUM**(sales\_per\_order)/ (**SELECT** **SUM**(sales\_per\_order) **FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022) \*100,0) **AS** percent\_total

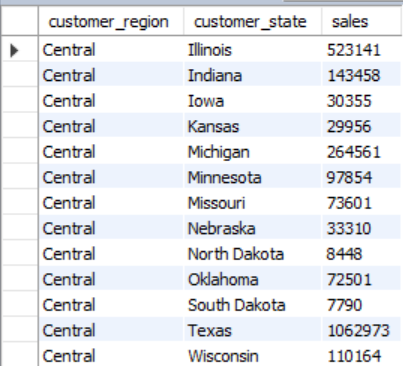
**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022

 **GROUP BY** 1;

Output:

**MAP VISUAL**



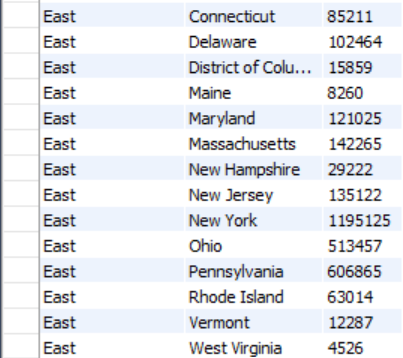
**-- YTD Sales by customer\_state**

**SELECT** customer\_region,customer\_state,

**SUM**(sales\_per\_order) **AS** sales

**FROM** ecommerce\_data

**WHERE YEAR**(order\_date) = 2022

** GROUP BY** 1,2

**ORDER BY** 1;

Output:

