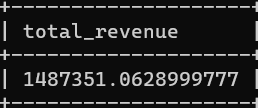
**SQL QUERIES ON RETAIL STORE DATASET:**

**KPI’s:**

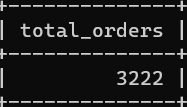
1. **TOTAL REVENUE**:

SELECT SUM(Sales) AS total\_revenue FROM store\_sales;



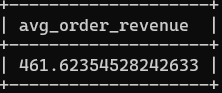
1. **TOTAL ORDERS**:

SELECT COUNT(DISTINCT order\_id) AS total\_orders FROM store\_sales;



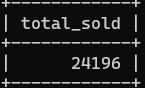
1. **AVERAGE ORDER REVENUE:**

SELECT (SUM(sales) / COUNT(DISTINCT order\_id)) AS avg\_order\_revenue FROM store\_sales;



1. **TOTAL SOLD:**

SELECT SUM(quantity) AS total\_sold FROM store\_sales;



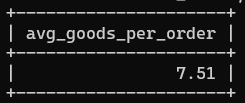
1. **AVERAGE GOODS SOLD PER ORDER:**

SELECT CAST(CAST(SUM(quantity) AS DECIMAL(10,2)) /

CAST(COUNT(DISTINCT order\_id) AS DECIMAL(10,2)) AS DECIMAL(10,2))

AS avg\_goods\_per\_order

FROM store\_sales



**TIME ANALYSIS:**

**DAILY TRENDS:**

1. **TOTAL ORDERS PER DAY OF WEEK:**

(**Changing datatype of order\_date from text to date:**

UPDATE store\_sales

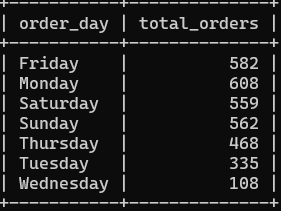
SET `order\_date` = STR\_TO\_DATE(`order\_date`, '%m/%d/%Y'); )

SELECT DAYNAME(order\_date) AS order\_day,

COUNT(DISTINCT order\_id) AS total\_orders

FROM store\_sales

GROUP BY DAYNAME(order\_date);



**MONTHLY TRENDS:**

1. **TOTAL ORDERS PER MONTH:**

SELECT MONTHNAME(order\_date) AS order\_month,

COUNT(DISTINCT order\_id) AS total\_orders

FROM store\_sales

GROUP BY MONTHNAME(order\_date);



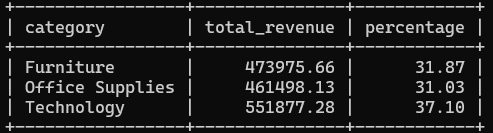
**PRODUCT ANALYSIS:**

1. **SALES % FOR EACH CATEGORY:**

SELECT category, CAST(SUM(sales) AS DECIMAL(10,2)) as total\_revenue, CAST(SUM(sales) \* 100 / (SELECT SUM(sales) from store\_sales) AS DECIMAL(10,2)) AS percentage

FROM store\_sales

GROUP BY category;



1. **SALES % FOR EACH SUB-CATEGORY:**

**(Altering column name “Sub-Category” to Sub\_Category:**

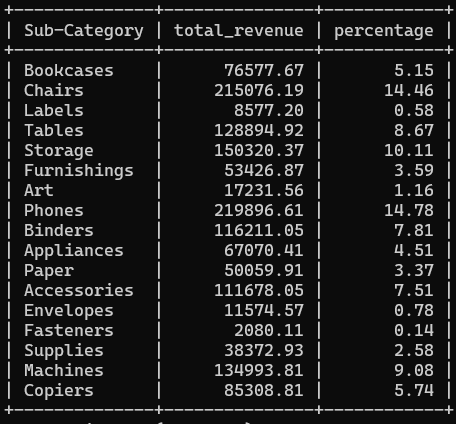
ALTER table store\_sales

CHANGE COLUMN `Sub-Category` Sub\_Category text; )

SELECT Sub\_Category, CAST(SUM(sales) AS DECIMAL(10,2)) as total\_revenue, CAST(SUM(sales) \* 100 / (SELECT SUM(sales) from store\_sales) AS DECIMAL(10,2)) AS percentage

FROM store\_sales

GROUP BY Sub\_Category;

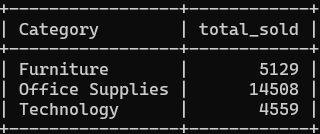


1. **TOTAL GOODS SOLD BY CATEGORY:**

SELECT Category, SUM(quantity) AS total\_sold

FROM store\_sales

GROUP BY Category;



1. **TOTAL GOODS SOLD BY SUB-CATEGORY:**

SELECT Sub\_Category, SUM(quantity) AS total\_sold

FROM store\_sales

GROUP BY Sub\_Category;



1. **TOP 5 PRODUCTS BY REVENUE:**

**(Altering Column name “Product Name” to Product:**

ALTER table store\_sales

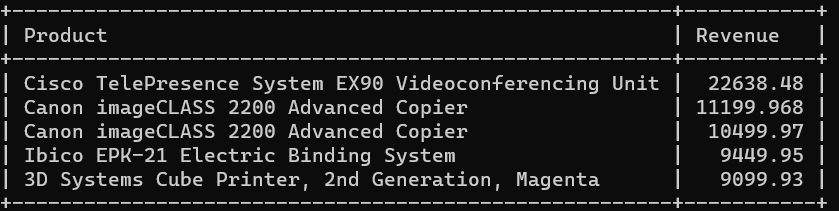
CHANGE COLUMN `Product Name` Product text; )

SELECT Product, Sales as Revenue

FROM store\_sales

ORDER BY Revenue DESC

LIMIT 5;



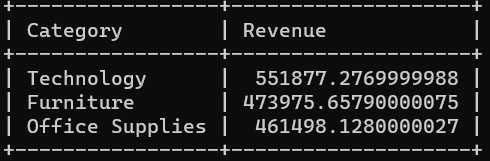
1. **TOP 3 CATEGORIES BY REVENUE:**

SELECT Category, SUM(Sales) as Revenue

FROM store\_sales

GROUP BY Category

ORDER BY Revenue DESC;



Note: Here, we have only 3 categories so the above query just sorts them in descending order with respect to revenue.

1. **TOP 5 SUB-CATEGORIES BY REVENUE:**

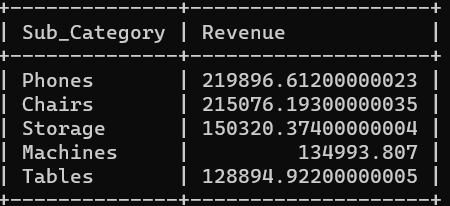
SELECT Sub\_Category, SUM(Sales) as Revenue

FROM store\_sales

GROUP BY Sub\_Category

ORDER BY Revenue DESC

LIMIT 5;



1. **TOP 5 PRODUCTS BY TOTAL ORDER:**

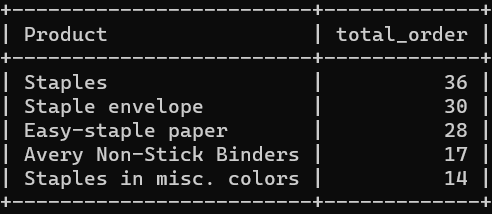
SELECT Product, COUNT(DISTINCT order\_id) as total\_order

FROM store\_sales

GROUP BY Product

ORDER BY total\_order DESC

LIMIT 5;



1. **TOP 3 CATEGORY BY TOTAL ORDER:**

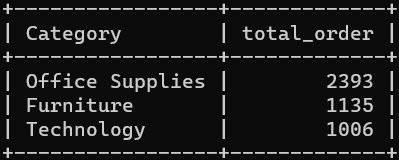
SELECT Category, COUNT(DISTINCT order\_id) as total\_order

FROM store\_sales

GROUP BY Category

ORDER BY total\_order DESC

LIMIT 3;



Note: Here, we have only 3 categories so the above query just sorts them in descending order with respect to total orders.

1. **TOP 5 SUB-CATEGORY BY TOTAL ORDER:**

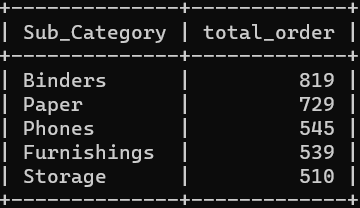
SELECT Sub\_Category, COUNT(DISTINCT order\_id) as total\_order

FROM store\_sales

GROUP BY Sub\_Category

ORDER BY total\_order DESC

LIMIT 5;



1. **TOP 3 CATEGORY BY PROFIT BY SALES %**:

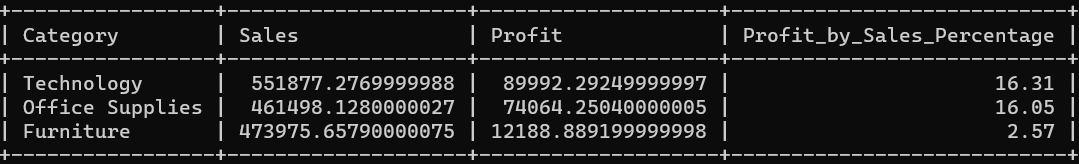
SELECT Category,SUM(Sales) AS Sales, SUM(Profit) AS Profit, CAST(SUM(Profit)\*100/SUM(Sales ) AS DECIMAL(10,2)) AS Profit\_by\_Sales\_Percentage

FROM store\_sales

GROUP BY Category

ORDER BY Profit\_by\_Sales\_Percentage DESC

LIMIT 3;



1. **TOP 5 SUB-CATEGORY BY PROFIT BY SALES %**:

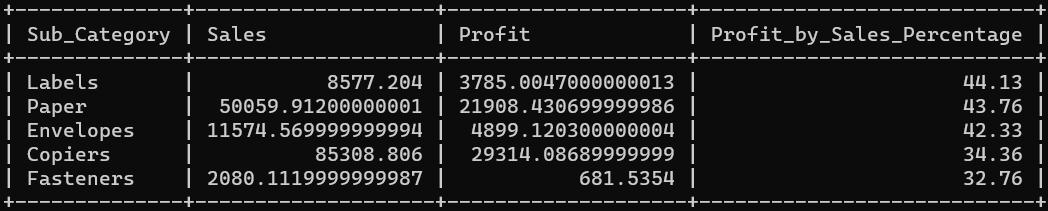
SELECT Sub\_Category,SUM(Sales) AS Sales, SUM(Profit) AS Profit, CAST(SUM(Profit)\*100/SUM(Sales) AS DECIMAL(10,2)) AS Profit\_by\_Sales\_Percentage

FROM store\_sales

GROUP BY Sub\_Category

ORDER BY Profit\_by\_Sales\_Percentage DESC

LIMIT 5;



1. **TOP 5 PRODUCT BY PROFIT BY SALES %**:

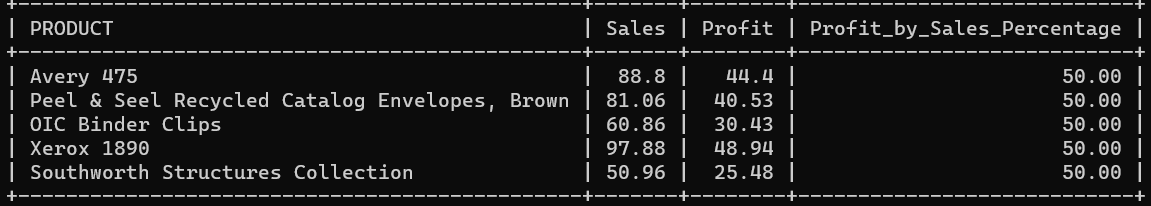
SELECT PRODUCT, SUM(Sales) AS Sales, SUM(Profit) AS Profit, CAST(SUM(Profit)\*100/SUM(Sales) AS DECIMAL(10,2)) AS Profit\_by\_Sales\_Percentage

FROM store\_sales

GROUP BY PRODUCT

ORDER BY Profit\_by\_Sales\_Percentage DESC

LIMIT 5;



**CUSTOMER ANALYSIS:**

1. **TOP 5 CUSTOMERS TO GENERATE MOST OF SALES OR REVENUE:**

**(Altering Column name “Customer Name” to Customer:**

ALTER Table store\_sales

CHANGE COLUMN `Customer Name` Customer text; )

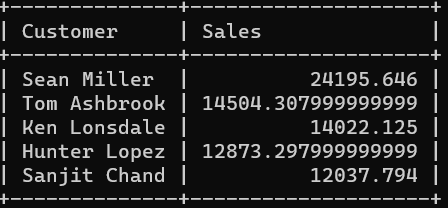
SELECT Customer, SUM(Sales) AS Sales

FROM store\_sales

GROUP BY Customer

ORDER BY Sales DESC

LIMIT 5;

****

1. **TOP 5 CUSTOMERS WITH MAXIMUM PROFIT BY SALES %:**

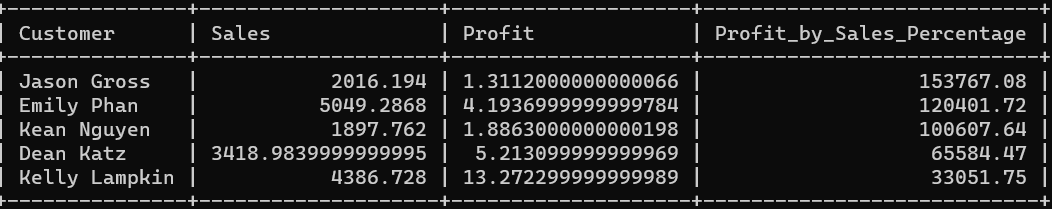
SELECT Customer, SUM(Sales) AS Sales, SUM(Profit) AS Profit, CAST(SUM(Sales)\*100/SUM(Profit) AS DECIMAL(10,2)) AS Profit\_by\_Sales\_Percentage

FROM store\_sales

GROUP BY Customer

ORDER BY Profit\_by\_Sales\_Percentage DESC

LIMIT 5;

****