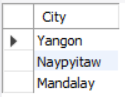
**WALMART SALES ANALYSIS QUERIES:**

**1.How many unique cities does the data have?**

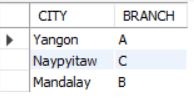
SELECT DISTINCT(City) FROM Sales;

****

**2.In which city is each branch?**

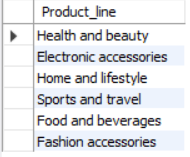
SELECT CITY,BRANCH FROM sales

GROUP BY CITY,BRANCH;



**3. How many unique product lines does the data have?**

SELECT DISTINCT(Product\_line) FROM sales;

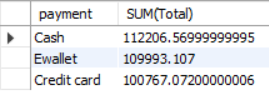


**4.What is the most common payment method?**

SELECT payment,SUM(Total) FROM sales

GROUP BY payment

ORDER BY SUM(Total) DESC ;

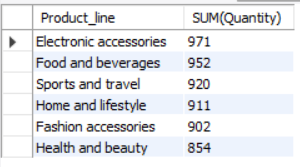


**5. What is the most selling product line?**

SELECT Product\_line,SUM(Quantity) FROM Sales

GROUP BY Product\_line

ORDER BY SUM(Quantity) DESC;

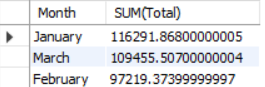


**6. What is the total revenue by month?**

SELECT Month,SUM(Total) FROM Sales

GROUP BY Month

ORDER BY SUM(Total) DESC ;

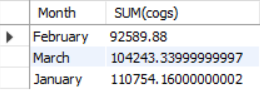


**7. What month had the largest COGS?**

SELECT Month,SUM(cogs) FROM Sales

GROUP BY Month

ORDER BY SUM(cogs);

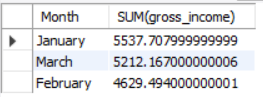


**8. What product line had the largest revenue?**

SELECT Month,SUM(gross\_income) FROM Sales

GROUP BY Month

ORDER BY SUM(gross\_income) DESC;

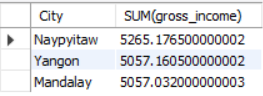


**9. What is the city with the largest revenue?**

SELECT City,SUM(gross\_income) FROM Sales

GROUP BY City

ORDER BY SUM(gross\_income) DESC;

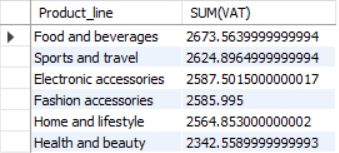


**10. What product line had the largest VAT?**

SELECT Product\_line,SUM(VAT) FROM Sales

GROUP BY Product\_line

ORDER BY SUM(VAT) DESC**;**

****

**11.** **Fetch each product line and add a column to those product line showing "Good", "Bad". Good if its greater than average sales**

SELECT Product\_line,

CASE

WHEN SUM(Quantity)>=AVG(Quantity) THEN "GOOD"

ELSE "BAD"

END

AS Review

FROM Sales

GROUP BY Product\_line;



**12. Which branch sold more products than average product sold?**

SELECT Branch FROM Sales

GROUP BY Branch

HAVING SUM(Quantity)>=AVG(Quantity);

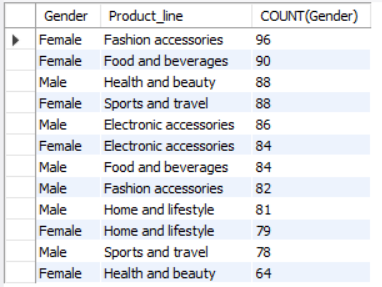


**13.** **What is the most common product line by gender?**

SELECT Gender,Product\_line,COUNT(Gender) FROM Sales

GROUP BY Gender,Product\_line

ORDER BY COUNT(Gender) DESC;

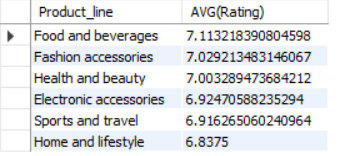


**14. What is the average rating of each product line?**

SELECT Product\_line,AVG(Rating) FROM Sales

GROUP BY Product\_line

ORDER BY AVG(Rating) DESC;



**15**. **Number of sales made in each time of the day per weekday**

SELECT Time\_of\_day,COUNT(Quantity) FROM Sales

WHERE Day="Monday"

GROUP BY Time\_of\_day

ORDER BY COUNT(Quantity) DESC;

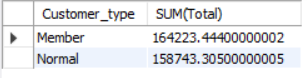
IN DAY NAME SPECIFY DAY OF WEEK

**16. Which of the customer types brings the most revenue?**

SELECT Customer\_type,SUM(Total) FROM Sales

GROUP BY Customer\_type

ORDER BY SUM(Total) DESC;

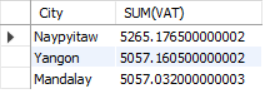


**17. Which city has the largest tax percent/ VAT?**

SELECT City,SUM(VAT) FROM Sales

GROUP BY City

ORDER BY SUM(VAT) DESC;

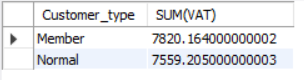


**18. Which customer type pays the most in VAT?**

SELECT Customer\_type,SUM(VAT) FROM Sales

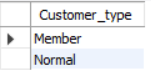
GROUP BY Customer\_type

ORDER BY SUM(VAT) DESC;



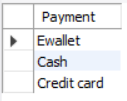
**19. How many unique customer types does the data have?**

SELECT DISTINCT(Customer\_type) FROM sales;



**20. How many unique payment methods does the data have?**

SELECT DISTINCT(Payment) FROM SALES;

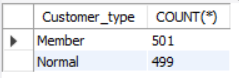


**21. What is the most common customer type?**

SELECT Customer\_type,COUNT(\*) FROM Sales

GROUP BY Customer\_type

ORDER BY COUNT(\*) DESC;

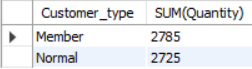


**22. Which customer type buys the most?**

SELECT Customer\_type,SUM(Quantity) FROM Sales

GROUP BY Customer\_type

ORDER BY SUM(Quantity) DESC**;**

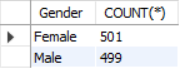
****

**23. What is the gender of most of the customers?**

SELECT Gender,COUNT(\*) FROM Sales

GROUP BY Gender

ORDER BY COUNT(\*) DESC;

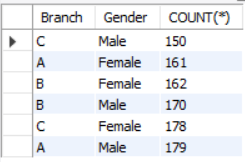


**24. What is the gender distribution per branch?**

SELECT Branch,Gender,COUNT(\*) FROM SALES

GROUP BY Branch,Gender

ORDER BY COUNT(\*);

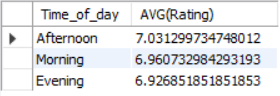


**25. Which time of the day do customers give most ratings?**

SELECT Time\_of\_day,AVG(Rating) FROM SALES

GROUP BY Time\_of\_day

ORDER BY AVG(Rating) DESC;



**26. Which time of the day do customers give most ratings per branch?**

SELECT Time\_of\_day,Branch,AVG(Rating) FROM SALES

GROUP BY Time\_of\_day,Branch

WHERE Branch =”A”

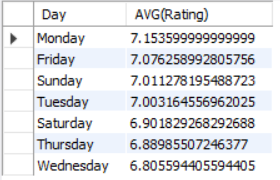
ORDER BY AVG(Rating) DESC;

**27. Which day fo the week has the best avg ratings?**

SELECT Day,AVG(Rating) FROM SALES

GROUP BY day

ORDER BY AVG(Rating) DESC;



**28. Which day of the week has the best average ratings per branch?**

SELECT Day,AVG(Rating) FROM SALES

WHERE BRANCH ="A"

GROUP BY day

ORDER BY AVG(Rating) DESC;

CALCULATED COLUMNS

## Revenue And Profit Calculations

$ COGS = unitsPrice \* quantity $

$ VAT = 5\% \* COGS $

$VAT$ is added to the $COGS$ and this is what is billed to the customer.

$ total(gross\_sales) = VAT + COGS $

$ grossProfit(grossIncome) = total(gross\_sales) - COGS $

\*\*Gross Margin\*\* is gross profit expressed in percentage of the total(gross profit/revenue)

$ \text{Gross Margin} = \frac{\text{gross income}}{\text{total revenue}} $