**WALMART SALES**

1. How many unique cities does the data have?

select count(distinct city) as unique\_cities from walmart;

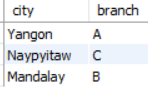
OUTPUT**:**



2. In which city is each branch?

select distinct city,branch from walmart;

OUTPUT**:**



* **Product Analysis:**

1. How many unique product lines does the data have?

select count(distinct product\_line) as "unique\_product\_lines" from walmart;

OUTPUT**:**



1. What is the most common payment method?

select max(payment) as common\_payment\_method from walmart;

OUT PUT**:**

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1. What is the most selling product line?

WITH LINE AS (

SELECT Product\_line , SUM(QUANTITY)AS "Most\_selling\_product\_line" FROM WALMART

GROUP BY Product\_line

ORDER BY COUNT(\*) DESC)

SELECT \* FROM LINE

WHERE Most\_selling\_product\_line=(SELECT MAX(Most\_selling\_product\_line) FROM LINE);

OUTPUT:

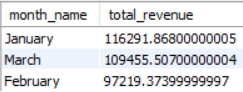


1. What is the total revenue by month?

select month\_name ,sum(total) as total\_revenue from walmart

group by month\_name;

OUTPUT:



1. What month had the largest COGS?

with large as (

select month\_name,sum(cogs) as largest\_COGS

from walmart

group by month\_name

order by largest\_COGS desc)

select \* from large

where largest\_COGS =(select max(largest\_COGS)from large);

OUTPUT:



1. What product line had the largest revenue?

WITH REVENUE AS (

select Product\_line, sum(Total) as " large\_Revenue" FROM walmart

group by product\_line

)

select \* from REVENUE

where large\_Revenue=(select max(large\_Revenue)

from revenue);

OUTPUT:



1. What is the city with the largest revenue?

WITH LARGE\_C AS (

SELECT DISTINCT(CITY), SUM(TOTAL) AS "REVENUE" FROM walmart

GROUP BY CITY)

SELECT \* FROM LARGE\_C

WHERE REVENUE= (SELECT MAX( REVENUE) FROM LARGE\_C);

OUTPUT:



1. What product line had the largest VAT?

WITH L\_VAT AS (

SELECT DISTINCT(Product\_line), SUM(VAT) AS "Largest\_VAT" FROM WALMART

GROUP BY PRODUCT\_LINE)

SELECT \* FROM L\_VAT

WHERE Largest\_VAT=(SELECT MAX(Largest\_VAT) FROM L\_VAT);

OUTPUT:



1. 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, count(quantity) as total\_sales,

case

when count(quantity) > avg(quantity) then "Good"

else "bad"

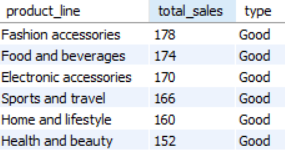
end "type"

from walmart

group by product\_line

order by total\_sales desc;

OUTPUT:



1. Which branch sold more products than average product sold?

with avg\_b as (

select branch ,sum( quantity) as "more\_products" from walmart

group by branch)

SELECT \* FROM AVG\_B WHERE more\_products>(

SELECT AVG(more\_products) AS products FROM AVG\_B);



1. What is the most common product line by gender?

WITH MALE AS (

SELECT GENDER,Product\_line, COUNT(PRODUCT\_LINE) AS PRODUCTS FROM walmart

WHERE GENDER="MALE"

GROUP BY Product\_line

)

SELECT \* FROM MALE

WHERE PRODUCTS=(SELECT MAX(PRODUCTS) FROM MALE);

WITH FEMALE AS (

SELECT GENDER, Product\_line, COUNT(PRODUCT\_LINE) AS PRODUCTS FROM walmart

WHERE GENDER="FEMALE"

GROUP BY Product\_line

)

SELECT \* FROM FEMALE

WHERE PRODUCTS=(SELECT MAX(PRODUCTS) FROM FEMALE);

OUTPUT:





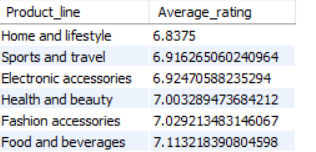
1. What is the average rating of each product line?

SELECT Product\_line, AVG(Rating) AS "Average\_rating" FROM WALMART

GROUP BY Product\_line

ORDER BY AVG(Rating);

OUTPUT:



## **Sales**

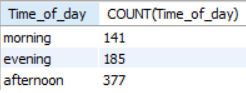
1. Number of sales made in each time of the day per weekday

SELECT Time\_of\_day,COUNT(Time\_of\_day) FROM walmart

WHERE Day\_name !="SATURDAY" AND Day\_name !="SUNDAY"

GROUP BY Time\_of\_day;

OUTPUT:



1. Which of the customer types brings the most revenue?

WITH REVENUE AS(

SELECT Customer\_type ,SUM(Total) AS "Most\_revenue" FROM WALMART

GROUP BY Customer\_type

ORDER BY SUM(Total) DESC)

SELECT \* FROM REVENUE

WHERE MOST\_REVENUE= (SELECT MAX(MOST\_REVENUE) FROM REVENUE);

OUTPUT:



1. Which city has the largest tax percent/ VAT (Value Added Tax)?

WITH VAT\_C AS (

SELECT City, SUM(VAT) AS "Largest\_VAT\_CITY" FROM WALMART

GROUP BY City

ORDER BY SUM(VAT) DESC )

SELECT \* FROM VAT\_C

WHERE Largest\_VAT\_CITY=(SELECT MAX( Largest\_VAT\_CITY) FROM VAT\_C);

OUTPUT:



1. Which customer type pays the most in VAT?

WITH VAT AS (

SELECT Customer\_type,SUM(VAT) AS "Most\_VAT\_paying\_customer\_type" FROM WALMART

GROUP BY Customer\_type

ORDER BY SUM(VAT) DESC)

SELECT \* FROM VAT

WHERE Most\_VAT\_paying\_customer\_type= (SELECT MAX( Most\_VAT\_paying\_customer\_type) FROM VAT);

OUTPUT:

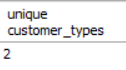


## **Customer**

1. How many unique customer types does the data have?

SELECT COUNT(DISTINCT(Customer\_type)) AS "unique customer\_types" FROM WALMART;

OUTPUT:



1. How many unique payment methods does the data have?

SELECT COUNT(DISTINCT(Payment)) AS "Unique\_payment\_methods" FROM WALMART;

OUTPUT:



1. What is the most common customer type?

WITH CUSTOMER AS (

SELECT Customer\_type,COUNT(\*) AS NO\_OF\_CUSTOMERS FROM WALMART

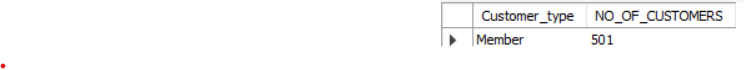
GROUP BY Customer\_type

Order BY COUNT(Customer\_type) DESC)

SELECT \* FROM CUSTOMER

WHERE NO\_OF\_CUSTOMERS=(SELECT MAX( NO\_OF\_CUSTOMERS) FROM CUSTOMER);

OUTPUT:



1. Which customer type buys the most?

WITH MOST AS (

SELECT Customer\_type , COUNT(Invoice\_id) AS NUMB FROM WALMART

GROUP BY Customer\_type

ORDER BY COUNT(Invoice\_id) DESC)

SELECT \* FROM MOST

WHERE NUMB=(SELECT MAX(NUMB) FROM MOST);

OUTPUT:



1. What is the gender of most of the customers?

WITH MOST1 AS(

SELECT Gender, COUNT(Gender) AS MOST FROM WALMART

GROUP BY Gender)

SELECT \* FROM MOST1

WHERE MOST=(SELECT MAX(MOST) FROM MOST1);

OUTPUT:



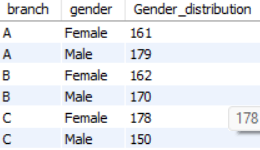
1. What is the gender distribution per branch?

SELECT branch,gender,count(gender) AS "Gender\_distribution"FROM WALMART

GROUP BY BRANCH ,gender

order by branch;

OUTPUT:



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

WITH RATINGS AS (

SELECT Time\_of\_day , COUNT(Rating) AS"Count\_of\_Ratings" FROM WALMART

GROUP BY Time\_of\_day )

SELECT \* FROM RATINGS WHERE Count\_of\_Ratings=(SELECT MAX(Count\_of\_Ratings) FROM RATINGS);

OUTPUT:



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

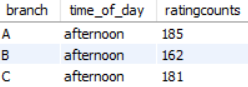
with branches as (select branch, time\_of\_day,count(rating) ratingcounts from walmart

group by 1,2 order by 1,2 desc)

,ranked as(select \*,dense\_rank() over(partition by branch order by ratingcounts desc) as ranks from branches)

select branch,time\_of\_day,ratingcounts from ranked where ranks=1;

OUTPUT:



1. Which day of the week has the best avg ratings?

WITH avg\_ratings AS (

SELECT day\_name, AVG(Rating) AS avg\_rating

FROM walmart

GROUP BY day\_name

),

max\_avg\_rating AS (

SELECT MAX(avg\_rating) AS max\_avg FROM avg\_ratings

)

SELECT day\_name, avg\_rating

FROM avg\_ratings

WHERE avg\_rating = (SELECT max\_avg FROM max\_avg\_rating);

OUTPUT:



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

WITH avg\_ratings AS (

SELECT day\_name,branch, AVG(Rating) AS avg\_rating

FROM walmart

GROUP BY day\_name,branch

),

max\_avg\_rating AS (

SELECT MAX(avg\_rating) AS max\_avg FROM avg\_ratings

)

SELECT day\_name,branch , avg\_rating

FROM avg\_ratings

WHERE avg\_rating = (SELECT max\_avg FROM max\_avg\_rating);

OUTPUT:

