Walmart Sales Analysis

Generic Questions

How many distinct cities are present in the dataset?

```
select distinct City from walmart;
```

In which city is each branch situated?

```
select distinct City,Branch from walmart group by City, Branch;
```

Product Analysis

How many distinct product lines are there in the dataset?

```
select distinct Product_line from walmart;
```

What is the most common payment method?

```
select Payment, COUNT(*) as Common_Payment_Method from walmart
group by Payment order by Common_Payment_Method desc limit 1;
```

What is the most selling product line?

```
select Product_line, count(*) as Most_Sold from walmart group by
Product_line order by Most_Sold desc limit 1;
```

What is the total revenue by month?

```
select MONTHNAME((Date)) as Month, SUM(Total) as Revenue from
walmart group by Month order by Revenue desc;
```

Which month recorded the highest Cost of Goods Sold (COGS)?

```
select MONTHNAME((Date)) as Month, SUM(cogs) as COGS from walmart
group by Month order by COGS desc limit 1;
```

Which product line generated the highest revenue?

```
select Product_line, SUM(Total) as Revenue from walmart group by
Product_line order by Revenue desc limit 1;
```

Which city has the highest revenue?

```
select City, SUM(Total) as Revenue from walmart group by City order by
Revenue desc limit 1;
```

Which product line incurred the highest VAT?

select Product_line, SUM(VAT) as VAT from walmart group by Product_line order by VAT desc limit 1;

Retrieve each product line and add a column product_category, indicating 'Good' or 'Bad,' based on whether its sales are above the average.

select Product_line, avg(Total) as Average, sum(Total) as Total_Sales, case when sum(Total) >= @average_sales then 'Good' else 'Bad' end as Category from Walmart group by Product_line;

Which branch sold more products than average product sold?

select Product_line, SUM(Total) as Sales_Total from Walmart group by Product_line having Sales_Total > AVG(Total) order by Sales_Total desc limit 1;

What is the most common product line by gender?

select Product_line, Gender, COUNT(Gender) as Common_Line from Walmart group by Product_line, Gender order by common_Line desc limit 1;

What is the average rating of each product line?

select Product_line, avg(Rating) as Avg_Rating from Walmart group by Product_line order by Avg_Rating desc;

Sales Analysis

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

alter table walmart add column DayTime text;

update walmart set DayTime = (Case when 'Time' between "00:00:00" and "12:00:00" then "Morning" when 'Time' between "12:01:00" and "16:00:00" then "Afternoon" When 'Time' between "16:01:00" and "19:00:00" then "Evening" else "Night" end);

Identify the customer type that generates the highest revenue.

select Customer_type, SUM(Total) as Total_Sales from walmart group by Customer_type order by Total_Sales desc limit 1;

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

select City, SUM(VAT) as Total_VAT, (SUM(VAT) / (select SUM(VAT) from walmart) * 100) as Percent_VAT from Walmart group by City order by Percent_VAT desc;

Which customer type pays the most VAT?

select Customer_type, SUM(VAT) as VAT from walmart group by Customer_type order by VAT desc limit 1;

Customer Analysis

How many unique customer types does the data have?

select COUNT(DISTINCT Customer_type) as Unique_Customer_Type from walmart;

How many unique customer types does the data have?

select COUNT(DISTINCT Payment) as Unique_Payment from walmart;

Which is the most common customer type?

select distinct Customer_type, COUNT(*) as Common_Customer_Type from walmart group by Customer_type order by Common_Customer_Type desc limit 1;

Which is the most common customer type?

select Customer_Type, Gender, Count(Gender) as Count from walmart group by Customer_Type,Gender order by Count desc limit 1;

What is the gender of most of the customers?

select Customer_Type, Gender, Count(Gender) as Count from walmart group by Customer_Type,Gender order by Count desc limit 1;

What is the gender of most of the customers?

select Branch, Gender, Count(Gender) as Gender_Distribution from walmart group by Branch, Gender order by Gender_Distribution;

Which time of the day do customers give most ratings?

select DayTime, Count(Rating) as Rating, avg(Rating) as Avg_Rating from walmart group by DayTime order by Rating desc limit 1;

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

select Branch, DayTime, Count(Rating) as Rating, avg(Rating) as Avg_Rating from walmart group by Branch, DayTime order by Rating desc;

Which day of the week has the best avg ratings?

select Day, avg(Rating) as Best_Rating from walmart group by Day order by Best_rating desc limit 1;

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

with rankedrating as (select Branch, Day, avg(Rating) as Best_Rating, ROW_NUMBER() OVER(PARTITION BY BRANCH ORDER BY AVG(Rating) desc) as rn from walmart group by Branch, Day) select Branch, Day, Best_Rating from rankedrating where rn = 1 order by Branch;