**Walmart Sales Date**

The "walmartsalesdata" table appears to contain information related to sales transactions, including details such as invoice ID, branch, city, customer type, gender, product line, unit price, quantity, tax, total, date, time, payment method, cost of goods sold (cogs), gross margin percentage, gross income, and customer ratings. The dataset likely represents sales across different branches and cities, with information on customer demographics and preferences.

One can analyze this data to derive insights such as the total revenue, average ratings, and sales patterns based on product lines and customer types. The table allows for exploring the relationships between variables, understanding which products are popular among certain customer segments, and identifying key performance indicators like gross income and margin percentages. Additionally, the inclusion of date and time information enables temporal analysis, allowing for the examination of sales trends over specific periods. The dataset appears comprehensive and can be utilized for strategic decision-making, marketing strategies, and optimizing inventory based on customer preferences and regional variations.

select \* from WalmartSalesData

--Retrieve the total number of records in the table--

select count(\*) as total\_records from WalmartSalesData;

-- List all unique branches in the dataset--

select distinct branch from WalmartSalesData

-- Find the average unit price for each product line--

select product\_line, round(avg(unit\_price),2) as avg\_unit\_price\_product from WalmartSalesData

group by product\_line;

--Calculate the total quantity sold for each customer type--

select customer\_type,SUM(quantity) as total\_quantity\_sold from WalmartSalesData

group by customer\_type

--Identify the highest gross income in the dataset and display the associated details-

select top 1 \* from WalmartSalesData order by gross\_income desc;

---------------OR-----------

select \* from WalmartSalesData

where gross\_income = (select MAX(gross\_income) from WalmartSalesData);

--List the cities where the average rating is above 4--

select round(AVG(rating),2) from WalmartSalesData where rating > 4;

select city, round(rating,2) as avg\_rating from WalmartSalesData

where rating > (select round(AVG(rating),2) from WalmartSalesData where rating > 4)

group by city,rating

order by avg\_rating desc;

--Retrieve the total sales (excluding tax) for each payment type--

select payment,(SUM(total)-SUM(tax\_5)) as Total\_sales from WalmartSalesData

group by payment

--Find the date with the highest total sales (including tax)--

select top 1 date,(SUM(total)+SUM(tax\_5)) as Total\_sales from WalmartSalesData

group by date

order by Total\_sales desc

--Determine the most common product line among female customers--

select product\_line, COUNT(product\_line) as product\_count, gender from WalmartSalesData

where gender = 'Female'

group by product\_line,gender

order by product\_count desc;

--Calculate the average gross margin percentage for each branch--

select branch,round(avg(gross\_margin\_percentage),2) as GMP from WalmartSalesData

group by Branch

--How many unique cities does the data have?--

select distinct city from WalmartSalesData;

--What is the total revenue by month--

select Month(date),SUM(Total) as Total\_revenue from WalmartSalesData

group by Month(date)

--What month had the largest COGS?--

select top 1 MONTH(date) as Month\_, sum(cogs) as COGS from WalmartSalesData

group by MONTH(date)

order by COGS desc

--What product line had the largest revenue?--

select top 1 product\_line, SUM(total) as Total\_revenue from WalmartSalesData

group by Product\_line,total

order by Total\_revenue desc

--What is the city with the largest revenue?--

select branch,city, SUM(total) as Total\_revenue from WalmartSalesData

group by branch,City

order by Total\_revenue desc

--What product line had the largest VAT?--

select Product\_line, AVG(tax\_5) as largestVAT from WalmartSalesData

group by Product\_line

order by largestVAT desc

--Fetch each product line and add a column to those product

-- line showing "Good", "Bad". Good if its greater than average sales--

select AVG(quantity) as avg\_quantity from WalmartSalesData

select product\_line, AVG(quantity) as avg\_quantity,

CASE when AVG(quantity) >6 then 'good' else 'bad'

end as remark from WalmartSalesData

group by product\_line

--Which branch sold more products than average product sold?--

select branch,AVG(Quantity) as avg\_quantity from WalmartSalesData

group by branch, Quantity

having AVG(quantity) > (select AVG(quantity) from WalmartSalesData)

--What is the most common product line by gender--

select product\_line, gender , count(quantity) as sum\_quantity from WalmartSalesData

group by product\_line,gender

order by sum\_quantity desc

--What is the average rating of each product line--

select product\_line, AVG(rating) as avg\_rating from WalmartSalesData

group by product\_line

order by avg\_rating desc;

--How many unique customer types does the data have?--

select COUNT(distinct invoice\_ID) as unique\_customers from WalmartSalesData;

--How many unique payment methods does the data have?--

select distinct payment from WalmartSalesData

--What is the most common customer type?--

select customer\_type, COUNT(\*) as count from WalmartSalesData

group by customer\_type

order by count desc

--What is the gender of most of the customers?--

select COUNT(invoice\_ID) as Customer\_count, Gender from WalmartSalesData

group by gender

order by Customer\_count desc

-- What is the gender distribution per branch?

select branch,gender, count(\*) as gender\_count from WalmartSalesData

group by Gender,branch

order by branch

-- Which time of the day do customers give most ratings?

select \* from WalmartSalesData

select time, AVG(rating) as avg\_rating from WalmartSalesData

group by time

order by avg\_rating desc

-- Which day fo the week has the best avg ratings?

select datename(weekday,date) as dayofweek, avg(rating) as avg\_rating from WalmartSalesData

group by datename(weekday,date)

order by avg\_rating desc

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

select branch,datename(weekday,date) as dayofweek,avg(rating) as avg\_rating from WalmartSalesData

group by datename(weekday,date),branch

order by avg\_rating desc