

# WALMART SALES DATA

## Purposes of The Project

Single table analysis

The major aim of this project is to gain insight into the sales data of store to understand the different

- **PRODUCT**

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

```
select count(distinct product_line) as unique_product_lines from walmartsalesdata;
```

Result Grid	Filter
unique_product_lines	
6	

2. What is the most common payment method?

```
select payment_method as max_payment_method_used from walmartsalesdata group by payment_method order by count(*) desc limit 1;
```

Result Grid	Filter Rows:
max_payment_method_used	
Ewallet	

3. What is the most selling product line?

```
select product_line as max_product_line from walmartsalesdata group by product_line order by count(*) desc limit 1;
```

Result Grid	Filter
max_product_line	
Fashion accessories	

4. What is the total revenue by month?

```
select month_name as month , sum(cogs) AS total_revenue from walmartsalesdata group by month_name order by month_name;
```

Result Grid	Filter Rows:
month	total_revenue
February	92589.88
January	110754.16000000002
March	104243.33999999997

5. What month had the largest COGS?

```
select month_name as largest_cogs_month from walmartsalesdata order by cogs desc limit 1;
```

Result Grid	Filter
largest_cogs_month	
February	

6. What product line had the largest revenue?

```
select product_line as largest_revenue_product_line from walmartsalesdata order by cogs desc limit 1;
```

Result Grid	Filter Rows:
largest_revenue_product_line	
▶ Fashion accessories	

7. What is the city with the largest revenue?

```
select city as largest_revenue_city from walmartsalesdata order by cogs desc limit 1;
```

Result Grid	Filter Rows:
largest_revenue_city	
▶ Naypyitaw	

8. What product line had the largest VAT?

```
select product_line as largest_VAT_product_line from walmartsalesdata order by VAT desc limit 1;
```

Result Grid	Filter Rows:
largest_VAT_product_line	
▶ Fashion accessories	

9. Fetch each product line and add a column to those product line showing "Good", "Bad" good if its greater than the Average sales?

```
SELECT product_line,  
CASE  
    WHEN avg(quantity) > 10 -- repla  
    THEN "Good"  
    ELSE "Bad"  
END AS quality_of_product_line  
FROM walmartsalesdata  
GROUP BY product_line;
```

Result Grid	Filter Rows:
product_line	quality_of_product_line
▶ Health and beauty	Bad
Electronic accessories	Bad
Home and lifestyle	Bad
Sports and travel	Bad
Food and beverages	Bad
Fashion accessories	Bad

Result 17 ×

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

```
select branch, sum(quantity) as total_quantity_sold from walmartsalesdata group by branch
having total_quantity_sold > avg(quantity) limit 1;
```

Result Grid			Filter Rows:
	branch	total_quantity_sold	
▶	A	1859	

11. What is the most common products than average product sold?

```
select product_line, gender from walmartsalesdata
group by product_line, gender order by count(gender) desc
limit 1;
```

Result Grid			Filter Rows:
	product_line	gender	
▶	Fashion accessories	Female	

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

```
select product_line, avg(rating) as average_rating
from walmartsalesdata
group by product_line;
```


Result Grid			Filter Rows:
	product_line	average_rating	
▶	Health and beauty	7.003289473684212	
	Electronic accessories	6.92470588235294	
	Home and lifestyle	6.8375	
	Sports and travel	6.916265060240964	
	Food and beverages	7.113218390804598	
	Fashion accessories	7.029213483146067	


Result 22 ×

- SALES

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


```
select day_name as weekday, time_of_day, COUNT(*) AS number_of_sales
from walmartsalesdata
group by weekday, time_of_day
order by
    FIELD(weekday, 'Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday'),
    FIELD(time_of_day, 'Morning', 'Afternoon', 'Evening');
```

Result Grid    Filter Rows: <input type="text"/>			
	weekday	time_of_day	number_of_sales
▶	Monday	Morning	21
	Monday	Afternoon	75
	Monday	Evening	51
	Tuesday	Morning	36
	Tuesday	Afternoon	71
	Tuesday	Evening	51
	Wednesday	Morning	22

Result 23 x 


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

```
select customer_type, sum(cogs) as most_revenue
from walmartsalesdata
group by customer_type
order by most_revenue desc
limit 1;
```

Result Grid    Filter Rows: <input type="text"/>		
	customer_type	most_revenue
▶	Member	156403.27999999985



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

```
select city from walmartsalesdata group by city order by sum(VAT) desc limit 1;
```

Result Grid   	
	city
▶	Naypyitaw

4. Which customer type pays the most in VAT?




```
select customer_type from walmartsalesdata group by customer_type order by sum(VAT) desc limit 1;
```

Result Grid				Filter Rows:
	customer_type			
▶	Member			

- CUSTOMER



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

```
select count(distinct customer_type) as unique_customer_type from walmartsalesdata;
```

Result Grid				Filter Rows:
	unique_customer_type			
	2			

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

```
select count(distinct payment_method) as unique_payment_methods from walmartsalesdata;
```

Result Grid				Filter Rows:
	unique_payment_methods			
▶	3			

3. What is the most common customer type?

```
select customer_type from walmartsalesdata group by customer_type order by count(customer_type) desc limit 1;
```

Result Grid

customer\_type

Member



4. Which customer type buys the most?

```
select customer_type, sum(quantity) as purchase from walmartsalesdata group by customer_type order by purchase desc limit 1;
```

Result Grid		Filter Rows:
	customer_type	purchase
▶	Member	2785



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

```
select gender from walmartsalesdata
group by gender
order by count(gender) desc
limit 1;
```

Result Grid				F
	gender			
▶	Female			

6. What is the gender distribution per branch?



```
select branch, gender, count(gender) as gender_distribution
from walmartsalesdata
group by branch, gender
order by branch asc;
```

Result Grid				Filter Rows:
	branch	gender	gender_distribution	
▶	A	Female	161	
	A	Male	179	
	B	Female	162	
	B	Male	170	
	C	Female	178	
	C	Male	150	

Result 32 ×

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

```
select time_of_day
from walmartsalesdata
group by time_of_day
order by count(rating) desc
limit 1;
```

Result Grid			
	time_of_day		
▶	Afternoon		

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

```
select branch, time_of_day, count(rating) from walmartsalesdata
group by branch, time_of_day
order by count(rating) desc
limit 3;
```

	branch	time_of_day	count(rating)
▶	A	Afternoon	185
	C	Afternoon	181
	B	Afternoon	162

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

```
select day_name
from walmartsalesdata
group by day_name
order by avg(rating) desc
limit 1;
```

	day_name
▶	Monday

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

```
select branch, avg(rating) as best_avg_rating
from walmartsalesdata
group by branch
order by branch asc;
```

	branch	best_avg_rating
▶	A	7.027058823529413
	B	6.8180722891566266
	C	7.072865853658538

## Key Conclusions from Walmart Sales Data Analysis

### 1. Geographical Spread:

- The data includes multiple unique cities, indicating a broad distribution of sales.

## **2. Branch Locations:**

- Each branch is located in a specific city, revealing the geographical distribution of Walmart outlets.

## **3. Product Variety:**

- The data features several unique product lines, showcasing a diverse product range.

## **4. Customer Preferences:**

- The most common payment method reflects preferred transaction methods among customers.
- The most popular product line indicates the top-selling category.

## **5. Revenue Trends:**

- Monthly revenue analysis identifies peak sales periods.
- The city with the largest revenue and the month with the highest COGS provide insights for financial planning.

## **6. Product Performance:**

- High-revenue product lines and those with significant VAT contributions highlight key performers.
- Product lines labeled as "Good" or "Bad" based on average sales offer a performance overview.

## **7. Branch Performance:**

- Identifying branches with above-average sales helps recognize high-performing locations.

## **8. Demographic Insights:**

- The most common product lines by gender aid in targeted marketing.
- Average ratings per product line provide customer satisfaction insights.



