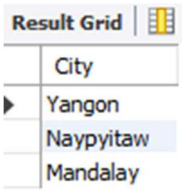
Walmart Sales Data Analysis Based on SQL

Generic Questions:

Q1. How many unique cities does the data have?

Query:

```
SELECT distinct City FROM walmart.w_sales;
```

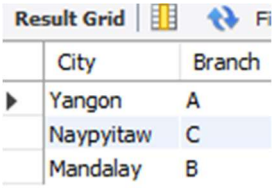


City
Yangon
Naypyitaw
Mandalay

Q2. In which city is each branch?

Query:

```
SELECT Distinct City, Branch FROM walmart.w_sales;
```



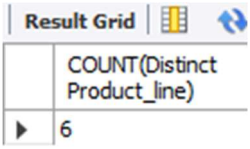
City	Branch
Yangon	A
Naypyitaw	C
Mandalay	B

Product

Q1. How many unique product lines does the data have?

Query:

Select COUNT(Distinct Product_line) From walmart.w_sales;



	COUNT(Distinct Product_line)
▶	6

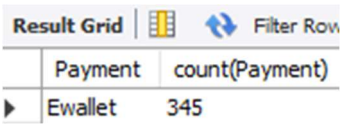
Q2. What is the most common payment method?

Query:

Select Payment, count(Payment) From walmart.w_sales

Group by Payment

Limit 1;



	Payment	count(Payment)
▶	Ewallet	345

Q3. What is the most selling product line?

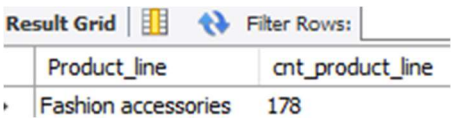
Query:

Select Product_line, count(Product_line) As cnt_product_line From walmart.w_sales

Group by Product_line

order by cnt_product_line desc

Limit 1;



	Product_line	cnt_product_line
▶	Fashion accessories	178

Q4. What is the total revenue by month?

Query:

```
Select month_name, Round(sum(Total), 2) As Total_Revenue From walmart.w_sales
Group by month_name
order by Total_Revenue desc;
```

Result Grid | Filter Rows:

month_name	Total_Revenue
January	116291.87
March	109455.51
February	97219.37

Q5. What month had the largest COGS?

Query:

```
Select month_name, Round(sum(COGS),2) As Total_COGS From walmart.w_sales
Group by month_name
order by Total_COGS desc
Limit 1;
```

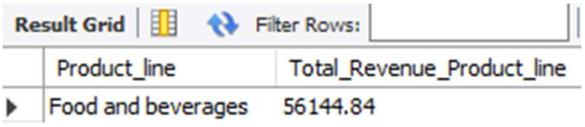
Result Grid | Filter Rows:

month_name	Total_COGS
January	110754.16

Q6. What product line had the largest revenue?

Query:

```
Select Product_line, Round(sum(Total), 2) As Total_Revenue_Product_line From walmart.w_sales
Group by Product_line
order by Total_Revenue_Product_line  desc
Limit 1 ;
```

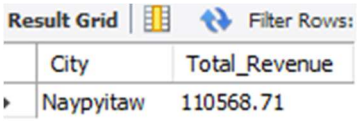


Product_line	Total_Revenue_Product_line
Food and beverages	56144.84

Q7. What is the city with the largest revenue?

Query:

```
Select City, Round(sum(Total), 2) As Total_Revenue From walmart.w_sales
Group by City
order by Total_Revenue desc
Limit 1 ;
```

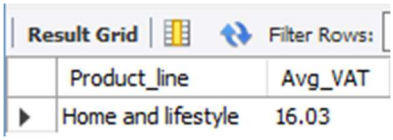


City	Total_Revenue
Naypyitaw	110568.71

Q8. What product line had the largest VAT?

Query:

```
Select Product_line, Round(AVG(VAT), 2) As Avg_VAT From walmart.w_sales
Group by Product_line
order by Avg_VAT   desc
Limit 1 ;
```

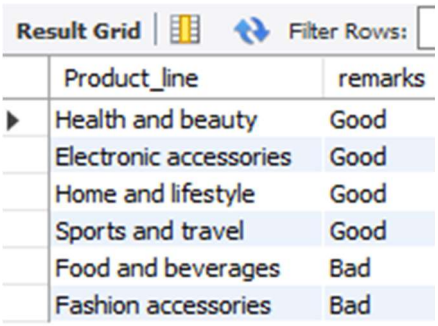


Product_line	Avg_VAT
Home and lifestyle	16.03

Q9. Fetch each product line and add a column to those product line showing "Good", "Bad". Good if its greater than average sales

Query:

```
Select Product_line,

(CASE

When Avg(Quantity) > 5.51 then "Good"

Else "Bad"

End )As remarks From walmart.w_sales

Group By Product_line;
```



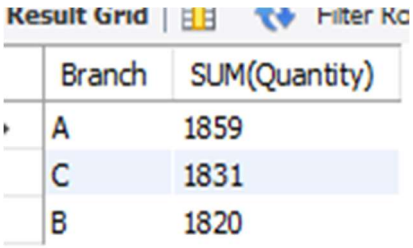
Result Grid | Filter Rows:

Product_line	remarks
Health and beauty	Good
Electronic accessories	Good
Home and lifestyle	Good
Sports and travel	Good
Food and beverages	Bad
Fashion accessories	Bad

Q10. Which branch sold more products than average product sold?

Query:

```
select Branch, SUM(Quantity) From walmart.w_sales

Group by Branch

Having SUM(Quantity)> (Select Avg(Quantity) From walmart.w_sales);
```



Result Grid | Filter Ro

Branch	SUM(Quantity)
A	1859
C	1831
B	1820

Q11.What is the most common product line by gender?

Query:

Select Gender, Product_line, SUM(Quantity) AS Total_Quantity From walmart.w_sales

Group by Gender, Product_line

Order By Total_Quantity desc;

Result Grid | Filter Rows:

Gender	Product_line	Total_Quantity
Female	Fashion accessories	530
Female	Food and beverages	514
Male	Health and beauty	511
Female	Home and lifestyle	498
Female	Sports and travel	496
Female	Electronic accessories	488
Male	Electronic accessories	483
Male	Food and beverages	438
Male	Sports and travel	424
Male	Home and lifestyle	413
Male	Fashion accessories	372
Female	Health and beauty	343

Q12.What is the average rating of each product line?

Query:

Select Product_line, Round(Avg(Rating), 2) AS Avg_Rating From walmart.w_sales

Group by Product_line

Order By Avg_Rating desc;

Result Grid | Filter Rows:

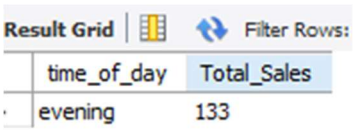
Product_line	Avg_Rating
Food and beverages	7.11
Fashion accessories	7.03
Health and beauty	7
Electronic accessories	6.92
Sports and travel	6.92
Home and lifestyle	6.84

Sales

Q1. Number of sales made in each time of the day per weekday.

Query1:

```
Select time_of_day, count(*) AS Total_Sales From walmart.w_sales
Where day_name = 'Sunday'
group by time_of_day
Order By Total_Sales desc;
```



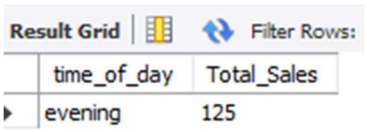
Result Grid | Filter Rows:

time_of_day	Total_Sales
evening	133

OR

Query2:

```
Select time_of_day, count(*) AS Total_Sales From walmart.w_sales
Where day_name = 'Monday'
group by time_of_day
Order By Total_Sales desc;
```



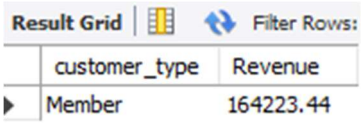
Result Grid | Filter Rows:

time_of_day	Total_Sales
evening	125

Q2. Which of the customer types brings the most revenue?

Query:

```
Select   customer_type, Round(SUM(Total), 2) AS Revenue From walmart.w_sales
Group By  customer_type
Order By  Revenue desc
Limit 1;
```

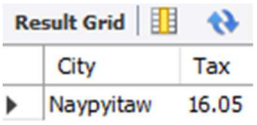


customer_type	Revenue
Member	164223.44

Q3. Which city has the largest tax percent/ VAT (Value Added Tax)?

Query:

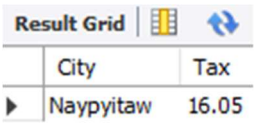
```
Select City,  CAST(Avg(VAT) AS Decimal(10,2)) AS Tax FROM walmart.w_sales
Group by City
Order By Tax desc
Limit 1;
```



City	Tax
Naypyitaw	16.05

Query2:

```
Select City,  Round(Avg(VAT),2) AS Tax FROM walmart.w_sales
Group by City
Order By Tax desc
Limit 1 ;
```

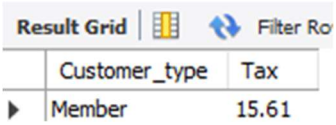


City	Tax
Naypyitaw	16.05

Q4. Which customer type pays the most in VAT?

Query:

```
Select Customer_type,  Round(Avg(VAT),2) AS Tax FROM walmart.w_sales
Group by Customer_type
Order By Tax desc
Limit 1 ;
```



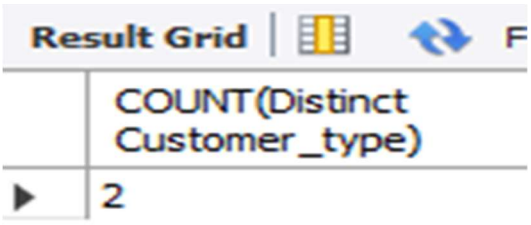
Customer_type	Tax
Member	15.61

Customer

Q1. How many unique customer types does the data have?

Query:

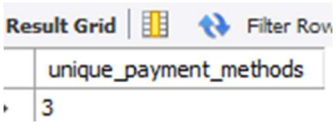
Select COUNT(Distinct Customer_type) FROM walmart.w_sales;



Q2. How many unique payment methods does the data have?

Query:

Select COUNT(distinct Payment) AS unique_payment_methods FROM walmart.w_sales;



Q3. What is the most common customer type?

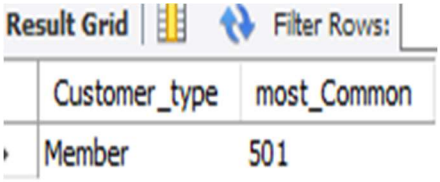
Query:

SELECT Customer_type, count(Customer_type) AS most_Common FROM walmart.w_sales

Group By Customer_type

order By most_Common desc

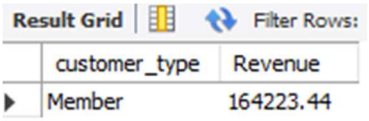
Limit 1;



Q4. Which customer type buys the most?

Query:

```
Select   customer_type, Round(SUM(Total), 2) AS Revenue From walmart.w_sales
Group By  customer_type
Order By  Revenue desc Limit 1;
```

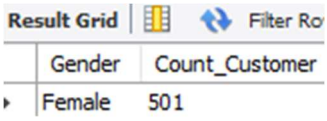


customer_type	Revenue
Member	164223.44

Q5. What is the gender of most of the customers?

Query:

```
Select Gender, COUNT(Customer_type) As Count_Customer FROM walmart.w_sales
Group By Gender
order By Count_Customer desc
limit 1;
```

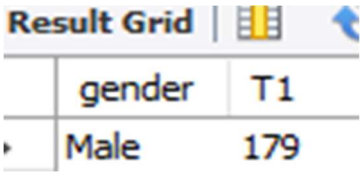


Gender	Count_Customer
Female	501

Q6. What is the gender distribution per branch?

Query: gender distribution for A

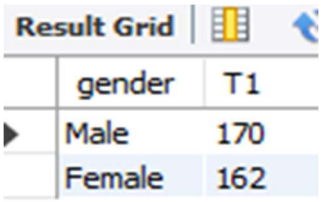
```
Select  gender, Count(*) As T1 FROM walmart.w_sales
Where Branch = 'A'
Group by gender
order by T1 desc;
```



gender	T1
Male	179

Query: gender distribution for B

```
Select  gender, Count(*) As T1 FROM walmart.w_sales
Where Branch = 'B'
Group by gender
order by T1 desc;
```

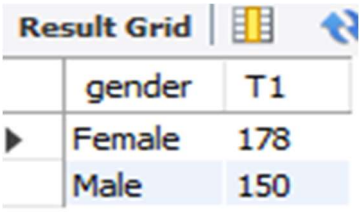


Result Grid

gender	T1
Male	170
Female	162

Query : gender distribution for C

```
Select  gender, Count(*) As T1 FROM walmart.w_sales
Where Branch = 'C'
Group by gender
order by T1 desc;
```



Result Grid

gender	T1
Female	178
Male	150

Q7. Which time of the day do customers give most ratings?

Query:

```
Select   time_of_day, round(Avg(Rating),2) AS T2 From walmart.w_sales
Group By  time_of_day
Order By T2 desc;
```

Result Grid | Filter Rows:

time_of_day	T2
evening	6.97

Q8. Which time of the day do customers give most ratings per branch?

Query:

```
Select   time_of_day, branch, round(Avg(Rating),2) AS T2 From walmart.w_sales
Group By  time_of_day, Branch
Order By branch ASC ;
```

Result Grid | Filter Rows:

time_of_day	branch	T2
evening	A	7.03
evening	B	6.82
evening	C	7.07

Q9. Which day fo the week has the best avg ratings?

Query:

```
Select day_name, Round(Avg(Rating),2) As   Mark_Rating from   walmart.w_sales
Group by day_name
order By Mark_Rating desc;
```

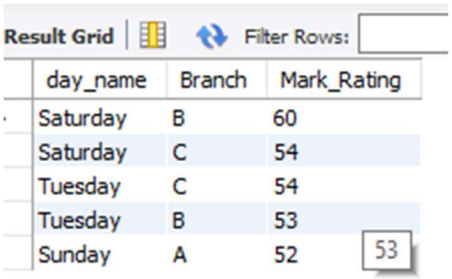
Result Grid | Filter Rows

day_name	Mark_Rating
Monday	7.15
Friday	7.08
Sunday	7.01
Tuesday	7
Saturday	6.9
Thursday	6.89
Wednesday	6.81

Q10.Which day of the week has the best average ratings per branch?

Query:

```
Select day_name, Branch, COUNT(day_name) As   Mark_Rating from   walmart.w_sales
Group by Branch, day_name
order By Mark_Rating desc limit 5;
```



Result Grid | Filter Rows:

day_name	Branch	Mark_Rating
Saturday	B	60
Saturday	C	54
Tuesday	C	54
Tuesday	B	53
Sunday	A	52

53