Generic Questions

1. How many distinct cities are present in the dataset?

   There are 3 distinct cities in this dataset.

2. In which city is each branch situated?

   Branch A is located in Yangon, B in Mandalay, and C in Naypyitaw.

Product Analysis

1. How many distinct product lines are there in the dataset?

   There are 6 distinct product lines.

2. What is the most common payment method?

   The most common payment method is Ewallet, although all payment methods are used roughly equally.

3. What is the most selling product line?

   The most selling product line is fashion accessories, although all product lines are sold roughly equally.

4. What is the total revenue by month? **Note: I'm assuming this is in USD**

Month Name	Revenue
January	$116291
March	$109455
February	$97219

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

January has the highest recorded COGS, followed by Marth then February, which have a drop off in COGS of ~6% and ~12% respectively. This is likely due to proximity to Christmas and New Years.

6. Which product line generated the highest revenue?

Product line	Revenue
Food and beverages	$56144.84
Sports and travel	$55122.83
Electronic accessories	$54337.53
Fashion accessories	$54305.9
Home and lifestyle	$53861.91
Health and beauty	$49193.74

7. Which city has the highest revenue?

City	Revenue
Naypyitaw	$110568.7
Yangon	$106200.4
Mandalay	$106197.7

8. Which product line incurred the highest VAT?

Product line	Total VAT
Food and beverages	$2673.564
Sports and travel	$2624.897
Electronic accessories	$2587.502
Fashion accessories	$2585.995
Home and lifestyle	$2564.853
Health and beauty	$2342.559

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

See Lines 111-123 in the Query Script file.

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

Only branch A sold more products than the average across all branches.

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

Female		Male	
Fashion accessories	96	Health and beauty	88
Food and beverages	90	Electronic accessories	86
Sports and travel	88	Food and beverages	84
Electronic accessories	84	Fashion accessories	82
Home and lifestyle	79	Home and lifestyle	81
Health and beauty	64	Sports and travel	78

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

Product Line	Rating
Food and beverages	7.113218
Fashion accessories	7.029213
Health and beauty	7.003289
Electronic accessories	6.924706
Sports and travel	6.916265
Home and lifestyle	6.8375

Sales Analysis

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

Week Day	Time	# of Sales
Friday	Afternoon	74
Friday	Evening	36
Friday	Morning	29
Monday	Afternoon	75
Monday	Evening	29
Monday	Morning	21
Saturday	Afternoon	81
Saturday	Evening	55
Saturday	Morning	28
Sunday	Afternoon	70
Sunday	Evening	41
Sunday	Morning	22
Thursday	Afternoon	76
Thursday	Evening	29
Thursday	Morning	33
Tuesday	Afternoon	71
Tuesday	Evening	51
Tuesday	Morning	36
Wednesday	Afternoon	81
Wednesday	Evening	40
Wednesday	Morning	22

2. Identify the customer type that generates the highest revenue.

Customer Type	Revenue
Member	$164,223.44
Normal	$158,743.31

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

   According to the tables labeling (the column for VAT being named 'Tax 5%')

   my findings earlier, and testing a few values, all the VAT values should be the

   same for all product lines and cities.

4. Which customer type pays the most VAT?

Considering the previous finding, the customer that spends the most money would pay the most VAT a dollar value, and all customers would pay the same percentage.

Customer Analysis

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

   There are 2 unique customer types as indicated by question 2 in the previous section, 'Member' and 'Normal'

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

   Payment:
   Ewallet
   Cash
   Credit card

3. Which is the most common customer type?

Customer Type	Count
Member	501
Normal	499

4. Which customer type buys the most? **Ambiguous, so I'll do item count.**

Customer Type	Item Count
Member	2785
Normal	2725

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

Gender	Count
Female	501
Male	499

6. What is the gender distribution per branch?

Branch	Gender	Count
A	Female	161
A	Male	179
B	Female	162
B	Male	170
C	Female	178
C	Male	150

7. Which time of the day do customers give the highest ratings by branch?

Branch	Time of Day	Average Rating
A	Afternoon	7.056756757
A	Evening	6.979268293
A	Morning	7.005479452
B	Afternoon	6.806790123
B	Evening	6.795495495
B	Morning	6.891525424
C	Afternoon	7.09558011
C	Evening	7.092045455
C	Morning	6.974576271

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

Branch	Day of the Week	Average Rating
A	Friday	7.312
A	Monday	7.097916667
A	Sunday	7.078846154
A	Tuesday	7.058823529
A	Thursday	6.958695652
A	Wednesday	6.91627907
A	Saturday	6.746
B	Monday	7.335897436
B	Tuesday	7.001886792
B	Sunday	6.888571429
B	Thursday	6.752272727
B	Saturday	6.736666667
B	Friday	6.694117647
B	Wednesday	6.452
C	Friday	7.278947368
C	Saturday	7.22962963
C	Wednesday	7.064
C	Monday	7.036842105
C	Sunday	7.02826087
C	Tuesday	6.951851852
C	Thursday	6.95