Mandatory Questionnaires

Finding the number of orders that have small, medium or large order value (small:0-10 dollars, medium:10-20 dollars, large:20+)

```
SELECT
   CASE
       WHEN SALES_VALUE >= 0 AND SALES_VALUE < 10 THEN 'Small'
       WHEN SALES_VALUE >= 10 AND SALES_VALUE < 20 THEN 'Medium'
       ELSE 'Large'
   END AS order_category,
   COUNT(*) AS order_count
FROM `E_commerce.transaction_data`
GROUP BY
   CASE
       WHEN SALES_VALUE >= 0 AND SALES_VALUE < 10 THEN 'Small'
       WHEN SALES_VALUE >= 10 AND SALES_VALUE < 20 THEN 'Medium'
       ELSE 'Large'
   END;
```

Row	order_category	order_count
1	Small	1256051
2	Large	13874
3	Medium	28561

Insights:

- Small orders dominate, suggesting strategies to encourage customers to add more items or upgrade purchases.
- Targeting loyalty programs for large order customers and promotions for small order customers can boost revenue.

Finding the number of orders that are small, medium or large order value(small:0-5 dollars, medium:5-10 dollars, large:10+)

```
SELECT
   CASE
       WHEN SALES_VALUE >= 0 AND SALES_VALUE < 5 THEN 'Small'
       WHEN SALES_VALUE >= 5 AND SALES_VALUE < 10 THEN 'Medium'
       ELSE 'Large'
   END AS order_category,
   COUNT(*) AS order_count
FROM `E_commerce.transaction_data`
GROUP BY
   CASE
       WHEN SALES_VALUE >= 0 AND SALES_VALUE < 5 THEN 'Small'
       WHEN SALES_VALUE >= 5 AND SALES_VALUE < 10 THEN 'Medium'
       ELSE 'Large'
   END;
```

Row	order_category	order_count
1	Small	1130685
2	Medium	125366
3	Large	42435

Insights:

- Small Orders (0-5 dollars) constitute a significant portion of transactions, suggesting a preference for convenience or affordability among customers.
    - Targeted marketing for low-cost items can expand customer base and encourage repeat purchases.
- Medium Orders (5-10 dollars) are fewer but still significant, indicating potential interest in higher-value items.
    - Opportunities for upselling or cross-selling can increase the average order value within this price range.
- Large Orders (10+ dollars) contribute significantly to revenue despite being fewer in number.
    - Promotions or discounts aimed at encouraging larger purchases can enhance sales and customer satisfaction.

Finding the top 3 stores with highest foot traffic for each week (Foot traffic: number of customers transacting)

```
WITH ranked_stores AS (
   SELECT
       STORE_ID,
       WEEK_NO,
       COUNT(DISTINCT household_key) AS foot_traffic,
       RANK() OVER (PARTITION BY STORE_ID ORDER BY COUNT(DISTINCT household_key) DESC)
AS store_rank
   FROM `E_commerce.transaction_data`
   GROUP BY STORE_ID, WEEK_NO)
SELECT
   STORE_ID,
   WEEK_NO,
   foot_traffic
FROM ranked_stores
WHERE store_rank <= 3 order by foot_traffic DESC;
```

Row	STORE_ID	WEEK_NO	foot_traffic
1	367	17	54
2	367	22	48
3	367	50	48
4	381	48	40
5	381	26	36
6	381	44	36
7	343	61	36
8	343	74	36
9	343	85	36

Insights:

Store ID 367 leads with the highest foot traffic, likely due to its advantageous location or visibility.

- Understanding the factors behind this high traffic can inform decisions on expansion, marketing, and store layout optimization.

Store ID 381 follows closely with significant foot traffic, indicating its appeal to customers.

- Analyzing customer characteristics and behavior can uncover insights for targeting specific demographics and areas for improvement.

Store ID 343 ranks third in foot traffic but still attracts substantial customer visits.

- Identifying factors influencing customer visits can enhance its competitiveness and market appeal, driving growth opportunities.

Creating a basic customer profiling with first, last visit, number of visits, average money spent per visit and total money spent order by highest avg money.

```
SELECT
   household_key,
   MIN(DAY) AS first_visit,
   MAX(DAY) AS last_visit,
   COUNT(*) AS number_of_visits,
   ROUND(AVG(SALES_VALUE),2) AS average_money_spent_per_visit,
   ROUND(SUM(SALES_VALUE),2) AS total_money_spent
FROM `E_commerce.transaction_data`
GROUP BY household_key
ORDER BY average_money_spent_per_visit DESC;
```

Row	household_key	first_visit	last_visit	number_of_visits	average_money_spe	total_money_spent
1	1730	34	707	99	16.73	1656.76
2	1727	109	118	9	12.72	114.51
3	2163	51	674	21	10.54	221.32
4	1339	52	701	18	10.42	187.53
5	991	44	665	44	10.26	451.6
6	2219	80	702	32	10.05	321.66
7	2428	67	702	18	10.0	180.0
8	755	36	709	576	9.48	5461.54
9	1023	107	710	2202	8.58	18901.09
10	120	62	653	16	8.18	130.92

```sql
SELECT
  household_key,
  MIN(DAY) AS first_visit,
  MAX(DAY) AS last_visit,
  COUNT(*) AS number_of_visits,
  ROUND(AVG(SALES_VALUE),2) AS average_money_spent_per_visit,
  ROUND(SUM(SALES_VALUE),2) AS total_money_spent
FROM `E_commerce.transaction_data`
GROUP BY household_key
ORDER BY total_money_spent DESC;
```

Row	household_key	first_visit	last_visit	number_of_visits	average_money_spe	total_money_spent
1	1023	107	710	2202	8.58	18901.09
2	1609	42	711	3313	4.17	13804.38
3	2322	66	711	2846	4.19	11934.66
4	1453	97	710	3281	3.27	10720.72
5	2459	35	704	3323	3.1	10307.55
6	1430	81	711	2686	3.78	10147.21
7	718	1	707	3426	2.8	9577.63
8	1111	32	707	3288	2.9	9542.2
9	1653	90	710	2674	3.56	9519.93
10	400	109	711	2339	4.05	9481.19

<u>Insights:</u>

Household Key 1730 exhibits the highest average spending per visit, suggesting they are a high-value customer with a consistent spending pattern.

- Tailoring marketing strategies or promotions to further increase spending and enhance loyalty can capitalize on this customer's potential.

Household Key 1023 stands out as the customer with the highest total spending, indicating their significant contribution to revenue.

- Analyzing their purchasing history and preferences can provide valuable insights into their loyalty and potential for future sales.
- Leveraging customer profiling metrics can inform targeted marketing strategies and personalized promotions to maximize revenue and foster long-term loyalty.

Performing single customer analysis selecting most spending customer for whom we have demographic information(because not all customers in transaction data are present in demographic table)(show the demographic as well as total spent).

```
SELECT
   d.household_key,
   d.AGE_DESC,
   d.INCOME_DESC,
   d.HH_COMP_DESC,
   d.HOMEOWNER_DESC,
   d.HOUSEHOLD_SIZE_DESC,
   d.KID_CATEGORY_DESC,
   d.MARITAL_STATUS_CODE,
   ROUND(SUM(t.SALES_VALUE),2) AS total_spent
FROM `E_commerce.demographics` d
JOIN `E_commerce.transaction_data` t ON d.household_key = t.household_key
GROUP BY
d.household_key,d.AGE_DESC,d.INCOME_DESC,d.HH_COMP_DESC,d.HOMEOWNER_DESC,d.HOUSEHOLD_S
IZE_DESC,d.KID_CATEGORY_DESC,d.MARITAL_STATUS_CODE ORDER BY total_spent DESC
LIMIT 1;
```

Row	household_key	AGE_DESC	INCOME_DESC	HH_COMP_DESC	HOMEOWNER_DESC	HOUSEHOLD_SIZE_DESC	KID_CATEGORY_DESC	MARITAL_STATUS_CODE	total_spent
1	1609	45-54	125-149K	2 Adults Kids	Homeowner	5+	3+	A	13804.38

Insights:

The demographic profile highlights a financially stable household with multiple adults and children, indicating a potentially higher disposable income.

- Targeted marketing for family-oriented products or services can resonate strongly with this segment, tapping into their specific needs and preferences.
- Offering promotions or loyalty rewards tailored to high-income families with children can incentivize repeat purchases and foster long-term customer loyalty.

Understanding the preferences and needs of this demographic is crucial for informed product development and inventory management decisions.

- Tailoring offerings to meet their specific demands can enhance customer satisfaction and drive sales, ultimately contributing to revenue growth.

Finding products(product table : SUB_COMMODITY_DESC) which are most frequently bought together and the count of each combination bought together. do not print a combination twice (A-B / B-A).

```
SELECT
   CONCAT(p1.SUB_COMMODITY_DESC, ' - ', p2.SUB_COMMODITY_DESC) AS product_combination,
   COUNT(*) AS combination_count
FROM
   (SELECT
       t1.BASKET_ID,
       t1.product_id AS product_id_1,
       t2.product_id AS product_id_2
   FROM
       `E_commerce.transaction_data` t1
   JOIN
       `E_commerce.transaction_data` t2 ON t1.BASKET_ID = t2.BASKET_ID
   WHERE
       t1.product_id < t2.product_id) AS combinations
JOIN
   `E_commerce.product` p1 ON combinations.product_id_1 = p1.product_id
JOIN
   `E_commerce.product` p2 ON combinations.product_id_2 = p2.product_id
GROUP BY
   CONCAT(p1.SUB_COMMODITY_DESC, ' - ', p2.SUB_COMMODITY_DESC)
ORDER BY
   combination_count DESC;
```

Row	product_combination	combination_count
1	YOGURT NOT MULTI-PACKS - YOGURT NOT MULTI-PACKS	15947
2	BABY FOOD - BEGINNER - BABY FOOD - BEGINNER	10080
3	SS ECONOMY ENTREES/DINNERS ALL - SS ECONOMY ENTREES/DINNERS ALL	6633
4	SOFT DRINK POWDER POUCHES - SOFT DRINK POWDER POUCHES	6375
5	FRZN SS PREMIUM ENTREES/DNRS/N - FRZN SS PREMIUM ENTREES/DNRS/N	6340
6	SFT DRNK 2 LITER BTL CARB INCL - SFT DRNK 2 LITER BTL CARB INCL	5459
7	SOFT DRINKS 12/18&15PK CAN CAR - SOFT DRINKS 12/18&15PK CAN CAR	5173
8	CANDY BARS (SINGLES)(INCLUDING - CANDY BARS (SINGLES) (INCLUDING	4194
9	BABY FOOD JUNIOR ALL BRANDS - BABY FOOD JUNIOR ALL BRANDS	3751
10	FLUID MILK WHITE ONLY - SOFT DRINKS 12/18&15PK CAN CAR	3580

Insights:

Yogurt not multi-pack and baby food are frequently bought together, indicating their popularity and potential for cross-selling opportunities.

- Analyzing commonly purchased items with yogurt can inform merchandising decisions, optimizing sales by placing complementary products nearby.
- Targeted promotions or discounts on related items can incentivize customers to make additional purchases, driving overall revenue.

Baby food's frequent pairing with other products reflects the needs of parents or caregivers for infant nutrition.

- Understanding the common product combinations can inform the creation of curated bundles, simplifying the shopping experience for parents.
- Offering promotions or discounts on baby-related products can attract new parents and foster brand loyalty, enhancing customer engagement and retention.

Find the weekly change in Revenue Per Account (RPA) (difference in spending by each customer compared to last week)(use lag function).

```sql
WITH weekly_rpa AS (
   SELECT
       HOUSEHOLD_KEY,
       ROUND(SUM(SALES_VALUE),2) AS weekly_spending,
       LAG(SUM(SALES_VALUE)) OVER (PARTITION BY HOUSEHOLD_KEY ORDER BY WEEK_NO) AS
prev_week_spending
   FROM
       `E_commerce.transaction_data`
   GROUP BY
       HOUSEHOLD_KEY,WEEK_NO
)
SELECT
   HOUSEHOLD_KEY,
   weekly_spending,
   ROUND(COALESCE(weekly_spending - prev_week_spending, 0),2) AS Weekly_rpa_change
FROM
   weekly_rpa ORDER BY Weekly_rpa_change DESC;
```

Row	HOUSEHOLD_KEY	weekly_spending	Weekly_rpa_change
1	1609	1068.98	944.87
2	1023	606.65	441.95
3	2080	466.3	401.27
4	2395	387.77	378.16
5	1767	351.54	345.54
6	1023	437.81	331.17
7	1592	358.14	328.03
8	1852	350.08	323.19
9	788	349.7	320.52
10	2266	361.44	310.89

Insight:

- Household Key 1609 demonstrated a substantial increase in spending, suggesting heightened purchasing activity or larger transactions. Tailoring personalized offers based on their preferences can further enhance loyalty and satisfaction.
- Household Key 1023 also experienced notable spending growth, albeit to a lesser extent. Understanding the underlying reasons can guide targeted marketing efforts to drive additional sales.
- Household Key 2080 saw a significant uptick in spending similar to other top households. Analyzing specific product categories driving this increase can inform strategic marketing and inventory management decisions.

Voluntary Questionnaires

Total sales value by Department

```
SELECT p.DEPARTMENT, ROUND(SUM(t.SALES_VALUE),2) AS total_sales
FROM `E_commerce.transaction_data` t
JOIN `E_commerce.product` p ON t.PRODUCT_ID = p.PRODUCT_ID
GROUP BY p.DEPARTMENT
ORDER BY total_sales DESC;
```

Insight:

- The grocery department dominates revenue generation with total sales of $2,046,695.13, emphasizing its critical role in driving business income.
- The drug GM department follows closely behind, contributing significantly to revenue with total sales of $527,588.65, highlighting its importance in the business's sales portfolio.

Average sales value per transaction

```
SELECT ROUND(AVG(SALES_VALUE),2) AS avg_sales_per_transaction
```

```
FROM `E_commerce.transaction_data`;
```

Row	avg_sales_per_transa
1	3.1

Insights:

The average sales value per transaction of $3.1 is indicative of the typical monetary value of individual transactions within the dataset. This information serves as a benchmark for understanding transactional patterns and assessing the overall economic impact of each customer interaction.

Top-selling products by quantity

```
SELECT p.BRAND, p.COMMODITY_DESC, p.SUB_COMMODITY_DESC, SUM(t.QUANTITY) AS
total_quantity_sold
FROM `E_commerce.transaction_data` t
JOIN `E_commerce.product` p ON t.PRODUCT_ID = p.PRODUCT_ID
GROUP BY p.BRAND, p.COMMODITY_DESC, p.SUB_COMMODITY_DESC
ORDER BY total_quantity_sold DESC
LIMIT 10;
```

Row	BRAND	COMMODITY_DESC	SUB_COMMODITY_DESC	total_quantity_sold
1	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	128097959
2	Private	FUEL	GASOLINE-REG UNLEADED	48608
3	Private	FLUID MILK PRODUCTS	FLUID MILK WHITE ONLY	44902
4	National	SOFT DRINKS	SOFT DRINKS 12/18&15PK CA...	23056
5	National	CANDY - CHECKLANE	CANDY BARS (SINGLES)(INCL...	22374
6	National	SOFT DRINKS	SFT DRNK 2 LITER BTL CARB I...	19293
7	National	YOGURT	YOGURT NOT MULTI-PACKS	18820
8	National	TROPICAL FRUIT	BANANAS	15841
9	National	FRZN MEAT/MEAT DINNERS	SS ECONOMY ENTREES/DINN...	14929
10	Private	YOGURT	YOGURT NOT MULTI-PACKS	13717

Top-selling products by sales value

```
SELECT p.BRAND, p.COMMODITY_DESC, p.SUB_COMMODITY_DESC, ROUND(SUM(t.SALES_VALUE),2) as
total_sale_value
```

```
FROM `E_commerce.transaction_data` t
JOIN `E_commerce.product` p ON t.PRODUCT_ID = p.PRODUCT_ID
GROUP BY p.BRAND, p.COMMODITY_DESC, p.SUB_COMMODITY_DESC,t.SALES_VALUE
ORDER BY total_sale_value DESC
LIMIT 10;
```

Row	BRAND	COMMODITY_DESC	SUB_COMMODITY_DESC	total_sale_value
1	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	16320.0
2	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	8610.0
3	Private	FLUID MILK PRODUCTS	FLUID MILK WHITE ONLY	8341.69
4	National	SOFT DRINKS	SOFT DRINKS 12/18&15PK CA...	8287.5
5	Private	FLUID MILK PRODUCTS	FLUID MILK WHITE ONLY	8109.93
6	National	SOFT DRINKS	SOFT DRINKS 20PK&24PK CA...	7159.04
7	National	BEERS/ALES	BEERALEMALT LIQUORS	6786.34
8	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	6580.0
9	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	6550.0
10	Private	COUPON/MISC ITEMS	GASOLINE-REG UNLEADED	6320.0

<u>Insights:</u>

The significance of fuel, fluid milk products, and soft drinks as top-selling products based on total sale value emphasizes the diverse consumer demand for essential commodities like fuel, dairy products, and soft drinks, highlighting their significance in driving revenue for businesses in the retail sector.

Fuel (Gasoline Regular-Unleaded):

- Represents a critical revenue driver, reflecting the essential nature of gasoline in daily life.
- Its high total sale value underscores its importance as a staple product with consistent demand.

Fluid Milk Products (White Only):

- Indicate the importance of dairy products in consumer preferences, with white fluid milk being a staple in many households.
- The substantial total sale value suggests a consistent and significant demand for this product category.

Soft Drinks (12, 15, and 18 Packs):

- Highlight the popularity of soft drinks, especially when sold in bulk quantities.
- The variety of pack sizes indicates flexibility in meeting consumer needs and preferences, contributing to overall sales.

Manufacturer market share

```sql
SELECT p.MANUFACTURER,
      ROUND(SUM(t.SALES_VALUE),2) AS total_sales,
      ROUND(SUM(t.SALES_VALUE) / (SELECT SUM(SALES_VALUE) FROM
`E_commerce.transaction_data` ) * 100,2) AS market_share_percentage
FROM `E_commerce.transaction_data` t
JOIN `E_commerce.product` p ON t.PRODUCT_ID = p.PRODUCT_ID
GROUP BY p.MANUFACTURER
ORDER BY market_share_percentage DESC
LIMIT 10;
```

Row	MANUFACTURER	total_sales	market_share_percentage
1	69	1090508.12	27.06
2	2	174160.8	4.32
3	764	83073.14	2.06
4	103	59227.85	1.47
5	1208	57409.78	1.42
6	317	51754.18	1.28
7	544	51087.33	1.27
8	1251	42872.18	1.06
9	673	41710.46	1.04
10	194	36736.85	0.91

Insights:

- Top three manufacturers based on market share emphasizes the significant dominance of Manufacturer 69, commanding over a quarter of the market. While Manufacturers 2 and 764 hold smaller shares, they still contribute to overall sales.
- This highlights the importance of Manufacturer 69 in the industry and suggests potential opportunities for the other manufacturers to expand their market presence.

Customer segmentation based on spending behavior:

```
WITH customer_spending AS (
   SELECT t.HOUSEHOLD_KEY,
          SUM(t.SALES_VALUE) AS total_spent,
          COUNT(DISTINCT t.BASKET_ID) AS num_transactions,
          AVG(t.SALES_VALUE) AS avg_transaction_value
   FROM `E_commerce.transaction_data` t
   GROUP BY t.HOUSEHOLD_KEY
)

SELECT CASE
          WHEN total_spent < 100 THEN 'Low spender'
          WHEN total_spent BETWEEN 100 AND 500 THEN 'Medium spender'
          ELSE 'High spender'
      END AS spending_category,
      COUNT(*) AS num_customers,
      ROUND(AVG(total_spent),2) AS avg_spending_per_customer,
      ROUND(AVG(num_transactions),2) AS avg_transactions_per_customer,
      ROUND(AVG(avg_transaction_value),2) AS avg_transaction_value_per_customer
FROM customer_spending
GROUP BY spending_category;
```

Row	spending_category	num_customers	avg_spending_per_cu	avg_transactions_pe	avg_transaction_valu
1	High spender	1842	2095.79	117.97	3.15
2	Low spender	96	58.0	8.47	2.82
3	Medium spender	562	290.63	27.11	3.15

Insights:

- **High spenders:** There are 1,842 customers in this category, with an average spending per customer of $2,095.79. These customers have a relatively high average number of transactions per customer (117.97) and a moderate average transaction value ($3.15).
- **Medium spenders:** There are 96 customers categorized as medium spenders, with an average spending per customer of $58.00. These customers have a lower average number of transactions per customer (8.47) and a slightly lower average transaction value ($2.82) compared to high spenders.

- **Low spenders**: This category comprises 562 customers, with an average spending per customer of $290.63. These customers have the lowest average number of transactions per customer (27.11) among the three categories, but their average transaction value per customer is comparable to high spenders at $3.15.

Identifying high-value customers based on total spending

```
SELECT HOUSEHOLD_KEY,
      total_spent,
      RANK() OVER (ORDER BY total_spent DESC) AS spending_rank
FROM (
   SELECT HOUSEHOLD_KEY,
         ROUND(SUM(SALES_VALUE),2) AS total_spent
   FROM `E_commerce.transaction_data`
   GROUP BY HOUSEHOLD_KEY
) AS customer_spending ORDER BY spending_rank;
```

Row	HOUSEHOLD_KEY	total_spent	spending_rank
1	1023	18901.09	1
2	1609	13804.38	2
3	2322	11934.66	3
4	1453	10720.72	4
5	2459	10307.55	5
6	1430	10147.21	6
7	718	9577.63	7
8	1111	9542.2	8
9	1653	9519.93	9
10	400	9481.19	10

Insights:

- Household Keys 1023, 1609, and 2322 collectively contribute a significant portion of total sales, indicating their substantial impact on the bottom line. By recognizing and targeting these high-value customers, businesses can implement tailored strategies to nurture their loyalty, such as personalized marketing initiatives, exclusive offers, and VIP programs.

Recommendations

- **Encourage Additional Purchases for Small Orders:**
  - Implement tactics such as "buy one, get one free" offers or discounts on related items to incentivize customers to add more items to their carts.
  - Utilize targeted email campaigns or personalized recommendations based on past purchases to suggest complementary products, thereby increasing the value of each transaction.

- **Target Large Order Customers with Loyalty Programs:**
  - Create a tiered loyalty program where customers earn points or rewards based on their total spending, encouraging them to continue making large orders to unlock exclusive benefits.
  - Offer special perks such as free shipping, early access to sales, or personalized discounts to reward and retain these high-value customers.

- **Promote Larger Purchases for Small Order Customers:**
  - Launch limited-time promotions or bundle deals where customers receive a discount or free gift when they reach a certain spending threshold.
  - Use targeted advertising on social media platforms or through email campaigns to showcase higher-priced items or product bundles to small order customers.

- **Analyze Successful Store Locations for Expansion:**

    - Conduct a detailed analysis of the demographic profile and consumer behavior in the vicinity of Store 367 to identify key factors contributing to its success, such as nearby attractions or population density.
    - Use geospatial analytics to identify similar potential locations for new store openings or consider investing in marketing campaigns to increase foot traffic to underperforming stores.

- **Tailor Marketing Efforts to High-Average Spending Customers:**
    - Segment customers with high average spending like Household Key 1730 into a VIP program, offering exclusive discounts, early access to sales, or personalized product recommendations.
    - Leverage data analytics to identify the most profitable products or categories for these customers and tailor marketing messages accordingly to further drive spending.

- **Create Curated Product Bundles Based on Frequently Bought Together Items:**
    - Analyze purchasing patterns and customer preferences to create pre-packaged bundles of frequently bought together items, simplifying the shopping experience and increasing average order value.
    - Promote these bundles through targeted marketing campaigns and prominently display them on the website to encourage upselling and cross-selling.

- **Optimize Pricing and Promotions Based on Changes in Customer Spending:**
    - Use predictive analytics to anticipate changes in customer spending behavior and adjust pricing strategies or promotional offers accordingly to capitalize on increased spending.
    - Monitor competitor pricing and market trends to ensure your pricing remains competitive while maximizing profitability.

- **Optimize Operations in the Grocery Department:**
    - Conduct regular reviews of product assortment and category performance within the grocery department to identify underperforming products and opportunities for optimization.
    - Utilize data analytics to forecast demand and ensure adequate stock levels of popular items, minimizing out-of-stock situations and maximizing sales potential.

- **Enhance Strategies in the Drug GM Department:**

    - Collaborate with suppliers to introduce new and innovative products within the drug GM department, catering to evolving consumer preferences and trends.
    - Implement targeted marketing campaigns to promote the drug GM department's offerings, highlighting key selling points such as quality, value, or convenience.

- **Personalize Marketing Strategies for Each Customer Segment:**
    - High Spenders (1,842 customers):
        - Offer personalized rewards or loyalty programs to incentivize continued high spending.
        - Implement targeted marketing campaigns highlighting luxury or high-end offerings.

    - Medium Spenders (96 customers):
        - Focus on upselling or cross-selling opportunities to increase the average transaction value.
        - Offer bundle deals or package discounts to encourage customers to increase their spending.

    - Low Spenders (562 customers):
        - Implement strategies to increase the frequency of transactions, such as limited-time offers or flash sales.
        - Implement remarketing campaigns to re-engage low spenders and encourage them to make additional purchases.
