

Customer Shopping Behavior SQL Queries

--Q1. What is the total revenue generated by male vs. female customers?

```
select gender, SUM(purchase_amount) as revenue
from customer
group by gender
```

--Q2. Which customers used a discount but still spent more than the average purchase amount?

```
select customer_id, purchase_amount
from customer
where discount_applied = 'Yes' and purchase_amount >= (select AVG(purchase_amount) from customer)
```

-- Q3. Which are the top 5 products with the highest average review rating?

```
select item_purchased, round(avg(review_rating::numeric),2) as "Average Product Rating"
from customer
group by item_purchased
order by avg(review_rating) desc
limit 5
```

--Q4. Compare the average Purchase Amounts between Standard and Express Shipping.

```
select shipping_type,
ROUND(AVG(purchase_amount),2)
from customer
where shipping_type in ('Standard','Express')
group by shipping_type;
```

--Q5. Do subscribed customers spend more? Compare average spend and total revenue

```
--between subscribers and non-subscribers.
SELECT subscription_status,
      COUNT(customer_id) AS total_customers,
      ROUND(AVG(purchase_amount),2) AS avg_spend,
      ROUND(SUM(purchase_amount),2) AS total_revenue
FROM customer
GROUP BY subscription_status
ORDER BY total_revenue,avg_spend DESC;
```

--Q6. Which 5 products have the highest percentage of purchases with discounts applied?

```
SELECT item_purchased,
      ROUND(100.0 * SUM(CASE WHEN discount_applied = 'Yes' THEN 1 ELSE 0 END)/COUNT(*),2) AS discount_rate
FROM customer
GROUP BY item_purchased
ORDER BY discount_rate DESC
LIMIT 5;
```

--Q7. Segment customers into New, Returning, and Loyal based on their total

-- number of previous purchases, and show the count of each segment.

```
with customer_type as (
SELECT customer_id, previous_purchases,
CASE
  WHEN previous_purchases = 1 THEN 'New'
  WHEN previous_purchases BETWEEN 2 AND 10 THEN 'Returning'
  ELSE 'Loyal'
END AS customer_segment
FROM customer)
```

```
select customer_segment,count(*) AS "Number of Customers"
from customer_type
group by customer_segment;
```

--Q8. What are the top 3 most purchased products within each category?

```
WITH item_counts AS (  
  SELECT category,  
         item_purchased,  
         COUNT(customer_id) AS total_orders,  
         ROW_NUMBER() OVER (PARTITION BY category ORDER BY COUNT(customer_id) DESC) AS item_rank  
  FROM customer  
  GROUP BY category, item_purchased  
)  
SELECT item_rank, category, item_purchased, total_orders  
FROM item_counts  
WHERE item_rank <= 3;
```

--Q9. Are customers who are repeat buyers (more than 5 previous purchases) also likely to subscribe?

```
SELECT subscription_status,  
       COUNT(customer_id) AS repeat_buyers  
FROM customer  
WHERE previous_purchases > 5  
GROUP BY subscription_status;
```

--Q10. What is the revenue contribution of each age group?

```
SELECT  
  age_group,  
  SUM(purchase_amount) AS total_revenue  
FROM customer  
GROUP BY age_group  
ORDER BY total_revenue desc;
```