

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;
```