SQL Queries

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

```
SELECT gender, SUM(purchase_amount)
FROM customer
GROUP BY gender;

ALTER TABLE customer
DROP COLUMN promo_code_used;
```

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

```
Select customer_id, purchase_amount
FROM customer
WHERE purchase_amount >= (SELECT AVG(purchase_amount) FROM customer)
AND discount_applied = 'Yes';
```

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

```
WITH t as (
SELECT item_purchased, round(AVG(review_rating)::NUMERIC, 2) as average_rating
FROM customer
GROUP by item_purchased
)
SELECT item_purchased, average_rating
FROM t
ORDER by average_rating DESC
LIMIT 5;
```

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

```
Select shipping_type, ROUND(AVG(purchase_amount)::NUMERIC, 2) as average
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 no_of_customers,
AVG(purchase_amount) as avg_spend, SUM(purchase_amount) 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* SUM(CASE WHEN discount_applied='Yes' then 1 else 0
END)/COUNT(*)::NUMERIC, 2) as percent_discount
FROM customer
GROUP by item_purchased
ORDER BY percent_discount 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 t 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(customer_segment) as count_segment
From t
GROUP by customer_segment;
```

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

```
WITH t as
```

```
(
SELECT category, item_purchased, COUNT(item_purchased) as count_items,
ROW_NUMBER() OVER (PARTITION BY category ORDER BY COUNT(item_purchased)
DESC) as rn
FROM customer
GROUP by category, item_purchased
)
SELECT *
FROM t
WHERE rn <= 3;
```

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

```
SELECT  subscription_status, COUNT(customer_id)
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 revenue
FROM customer
GROUP BY age_group
Order by revenue DESC;
```