SQL QUERIES FOR CUSTOMER SHOPPING BEHAVIOUR.

--Q. Checking whether is ther any null value?

```
SELECT COUNT(*)
FROM customer
WHERE purchase_amount IS NULL;
```

--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 TRIM(LOWER(discount_applied)) = 'yes'
AND purchase_amount >= (
    SELECT AVG(purchase_amount)
    FROM customer
    WHERE TRIM(LOWER(discount_applied)) = 'yes'
);
```

-- 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 * 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;
```