Cus

Customer ShoppingBehavior Analytics (SQL)

```sql
-- Q1. What is the total revenue generated by male vs. female customers?
SELECT
    Gender, SUM(purchase_amount) AS Total_revenue
FROM
    customer_shopping_behavior
GROUP BY gender;
```

Gender	Total_revenue
Male	155438.00
Female	75191.00

```sql
-- Q2. Which customers used a discount but still spent more than the average purchase amount?
SELECT
    customer_id, purchase_amount
FROM
    customer_shopping_behavior
WHERE
    discount_applied = 'Yes'
        AND purchase_amount >= (SELECT
            AVG(purchase_amount)
        FROM
            customer_shopping_behavior);
```

customer_id	purchase_amount
2	64.00
3	73.00
4	90.00
7	85.00
9	97.00
12	68.00
13	72.00
16	81.00
20	90.00
22	62.00
24	88.00
29	94.00
32	79.00
33	67.00
35	91.00
37	69.00
40	60.00

```sql
-- Q3. Which are the top 5 products with the highest average review rating?
SELECT
    item_purchased,
    ROUND(AVG(review_rating), 2) AS Average_review_rating
FROM
    customer_shopping_behavior
GROUP BY item_purchased
ORDER BY Average_review_rating ASC
LIMIT 5;
```

item_purchased	Average_review_rating
Shirt	3.62
Jeans	3.65
Blouse	3.68
Shorts	3.71
Scarf	3.71

```sql
-- Q4. Compare the average Purchase Amounts between Standard and Express Shipping.
SELECT
    shipping_type,
    ROUND(AVG(Purchase_amount), 2) AS Purchase_Amount
FROM
    customer_shopping_behavior
WHERE
    shipping_type IN ('Express' , 'Standard')
GROUP BY shipping_type;
```

shipping_type	Purchase_Amount
Express	60.34
Standard	58.41

```sql
-- Q5. Do subscribed customers spend more? Compare average spend and total revenue between subscribers and non-subscribers.
SELECT
    subscription_status,
    COUNT(customer_id) AS Count_of_customer,
    ROUND(AVG(Purchase_amount), 2) AS Average_spend,
    ROUND(SUM(Purchase_amount), 2) AS total_revenue
FROM
    customer_shopping_behavior
GROUP BY subscription_status;
```

subscription_status	Count_of_customer	Average_spend	total_revenue
Yes	1033	59.42	61377.00
No	2830	59.81	169252.00

```sql
-- 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_shopping_behavior
GROUP BY item_purchased
ORDER BY Discount_rate DESC
LIMIT 5;
```

item_purchased	Discount_rate
Hat	49.67
Sneakers	49.66
Coat	48.43
Sweater	47.20
Pants	46.43

```sql
-- 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_shopping_behavior)
select customer_segment, count(*) as "Number of Customers"
from customer_type
group by customer_segment;
```

customer_segment	Number of Customers
Loyal	3085
Returning	695
New	83

```sql
-- Q8. What are the top 3 most purchased products within each category?
with products_category 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_shopping_behavior
group by category, item_purchased)
select Item_rank, category, Item_purchased, total_orders
from products_category
where item_rank<=3;
```

Item_rank	category	Item_purchased	total_orders
1	Accessories	Jewelry	170
2	Accessories	Sunglasses	159
3	Accessories	Belt	159
1	Clothing	Blouse	169
2	Clothing	Shirt	168
3	Clothing	Pants	168

```sql
-- 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_shopping_behavior
WHERE
    previous_purchases > 5
GROUP BY subscription_status;
```

subscription_status	repeat_buyers
Yes	939
No	2503

```sql
-- Q10. What is the revenue contribution of each age group?
SELECT
    Age, SUM(Purchase_amount) AS Total_revenue
FROM
    customer_shopping_behavior
GROUP BY Age
ORDER BY Total_revenue DESC;
```

Age	Total_revenue
69	5399.00
49	5378.00
54	5282.00
25	5244.00
57	5200.00
41	5196.00
28	5104.00