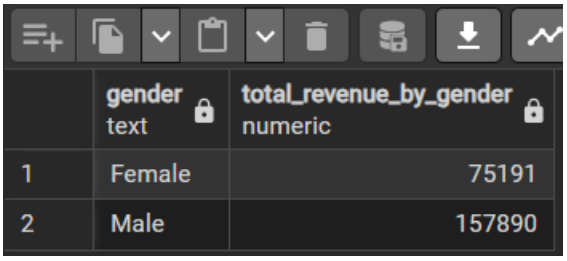
Customer Behavior SQL Queries

A . Q and A

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

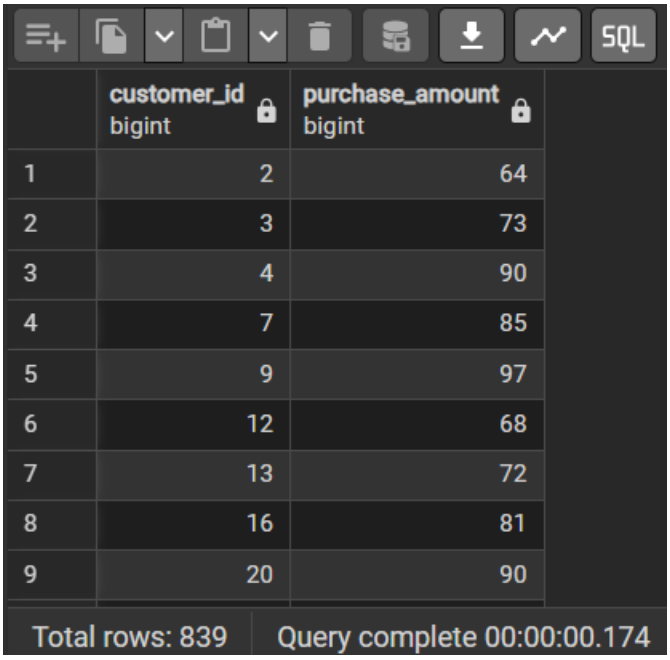
```
SELECT gender, SUM(purchase_amount) AS total_revenue_by_gender

FROM customer

GROUP BY gender
```



	gender text	total_revenue_by_gender numeric
1	Female	75191
2	Male	157890

2. 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)
```

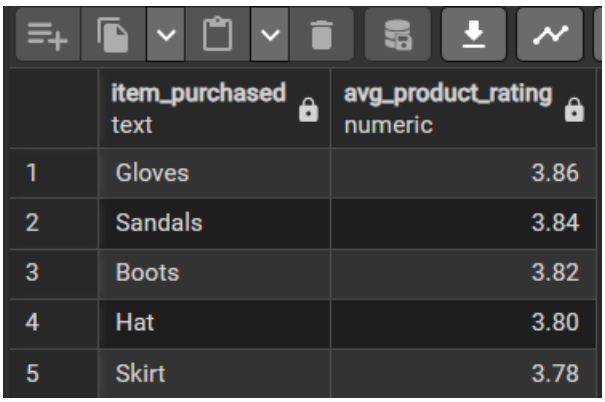


	customer_id bigint	purchase_amount bigint
1	2	64
2	3	73
3	4	90
4	7	85
5	9	97
6	12	68
7	13	72
8	16	81
9	20	90

Total rows: 839 Query complete 00:00:00.174

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

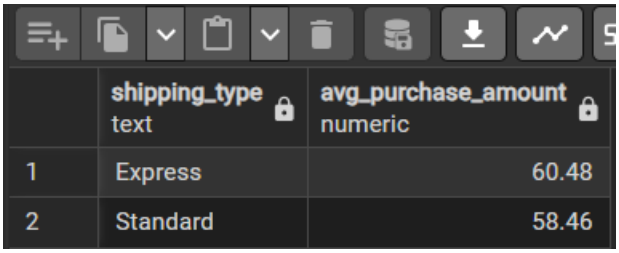
```
SELECT item_purchased, ROUND(AVG(review_rating::NUMERIC), 2)

AS avg_product_rating

FROM customer

GROUP BY item_purchased

ORDER BY avg_product_rating

DESC LIMIT 5;
```



	item_purchased text	avg_product_rating numeric
1	Gloves	3.86
2	Sandals	3.84
3	Boots	3.82
4	Hat	3.80
5	Skirt	3.78

4. Compare the average Purchase Amounts between Standard and Express Shipping.

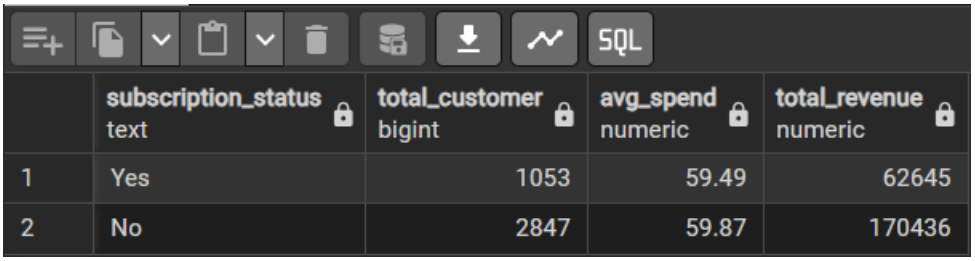
```
SELECT shipping_type, ROUND(AVG(purchase_amount), 2)

AS avg_purchase_amount

FROM customer

WHERE shipping_type IN ('Standard','Express')

GROUP BY shipping_type

ORDER BY avg_purchase_amount DESC;
```



	shipping_type text	avg_purchase_amount numeric
1	Express	60.48
2	Standard	58.46

5. Do subscribed customers spend more? Compare average spend and total revenue between subscribers and non-subscribers.

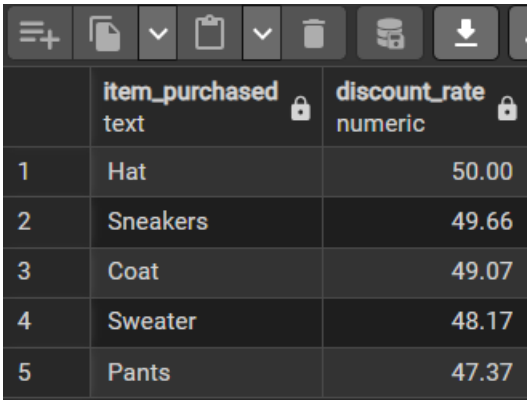
```
SELECT subscription_status, COUNT(customer_id)

AS total_customer, ROUND(AVG(purchase_amount), 2)

AS avg_spend, SUM(purchase_amount) AS total_revenue

FROM customer

WHERE subscription_status IN ('Yes','No')

GROUP BY subscription_status

ORDER BY subscription_status DESC;
```



	subscription_status text	total_customer bigint	avg_spend numeric	total_revenue numeric
1	Yes	1053	59.49	62645
2	No	2847	59.87	170436

6. 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;
```

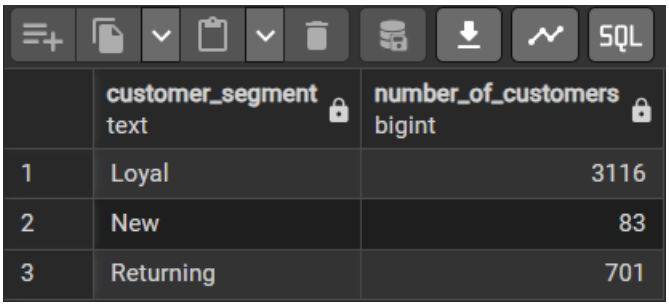


	item_purchased text	discount_rate numeric
1	Hat	50.00
2	Sneakers	49.66
3	Coat	49.07
4	Sweater	48.17
5	Pants	47.37

7. 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
```

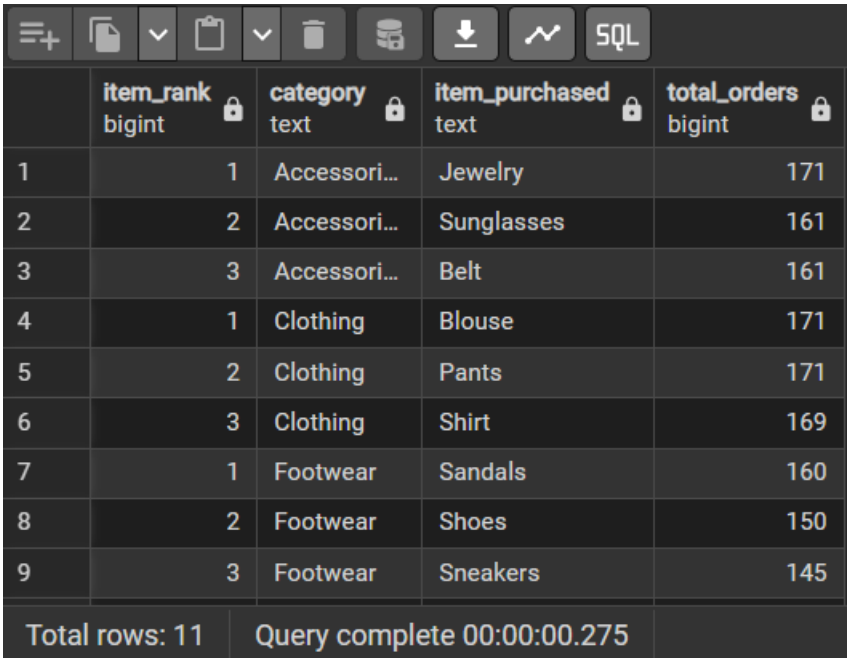
```
( SELECT customer_id, previous_purchases,
CASE WHEN previous_purchases = 1 THEN 'New'
WHEN previous_purchases BETWEEN 2 AND 10 THEN 'Returning'
ELSE 'Loyal' END AS customer_segment
FROM customer )
SELECT customer_segment, COUNT(*) AS number_of_customers
FROM customer_type
GROUP BY customer_segment;
```



	customer_segment text	number_of_customers bigint
1	Loyal	3116
2	New	83
3	Returning	701

8. 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;
```

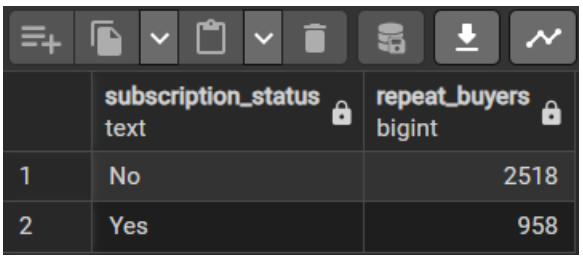


	item_rank bigint	category text	item_purchased text	total_orders bigint
1	1	Accessori...	Jewelry	171
2	2	Accessori...	Sunglasses	161
3	3	Accessori...	Belt	161
4	1	Clothing	Blouse	171
5	2	Clothing	Pants	171
6	3	Clothing	Shirt	169
7	1	Footwear	Sandals	160
8	2	Footwear	Shoes	150
9	3	Footwear	Sneakers	145

Total rows: 11 Query complete 00:00:00.275

9. 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;
```



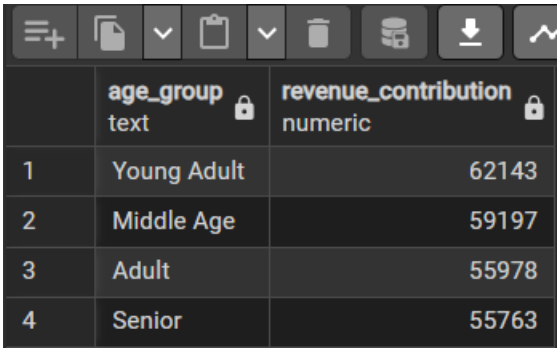
	subscription_status text	repeat_buyers bigint
1	No	2518
2	Yes	958

10. What is the revenue contribution of each age group?

```
SELECT age_group, SUM(purchase_amount) AS revenue_contribution
FROM customer
```

GROUP BY age_group

ORDER BY revenue_contribution DESC;



	age_group text	revenue_contribution numeric
1	Young Adult	62143
2	Middle Age	59197
3	Adult	55978
4	Senior	55763