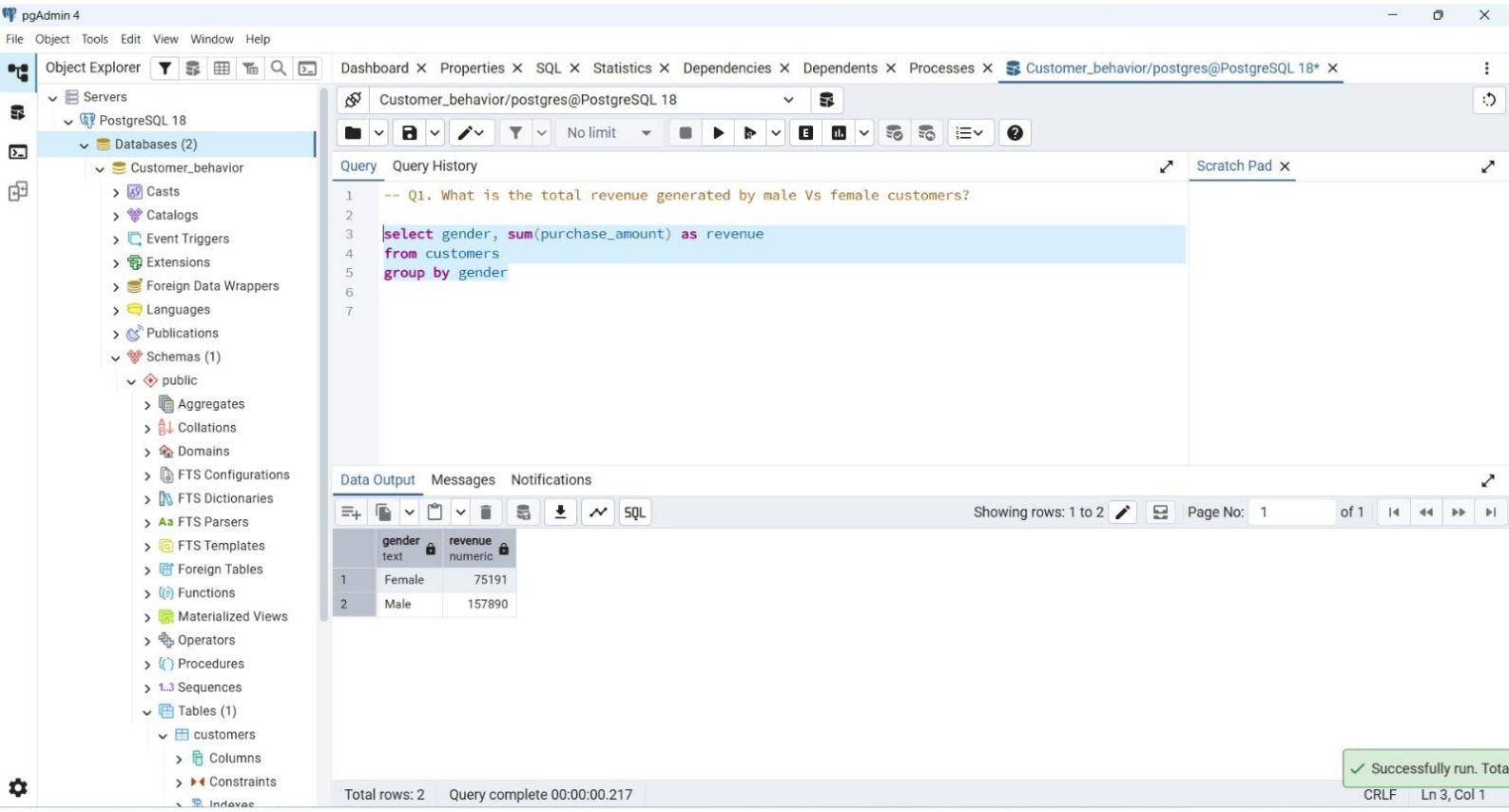
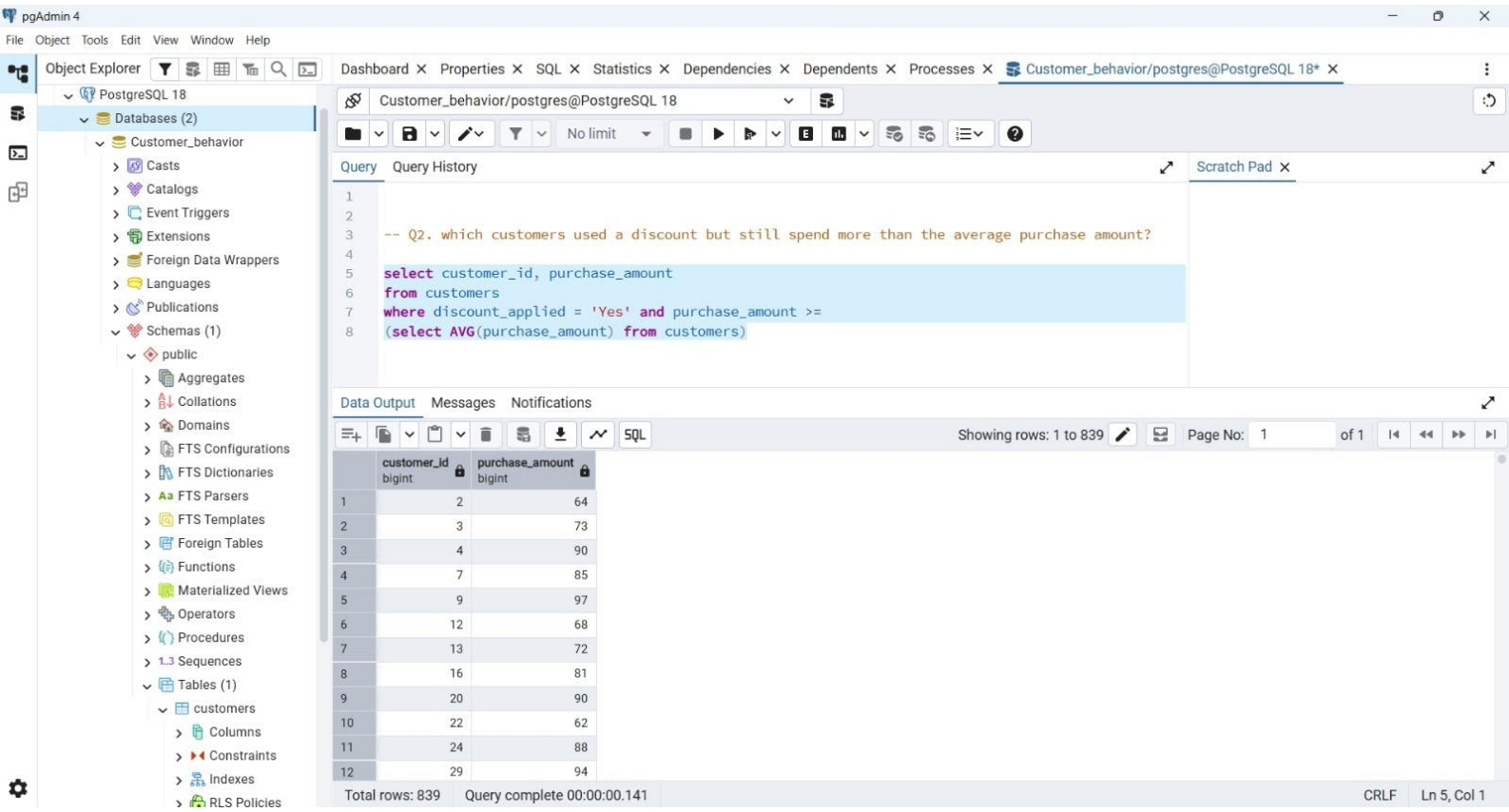
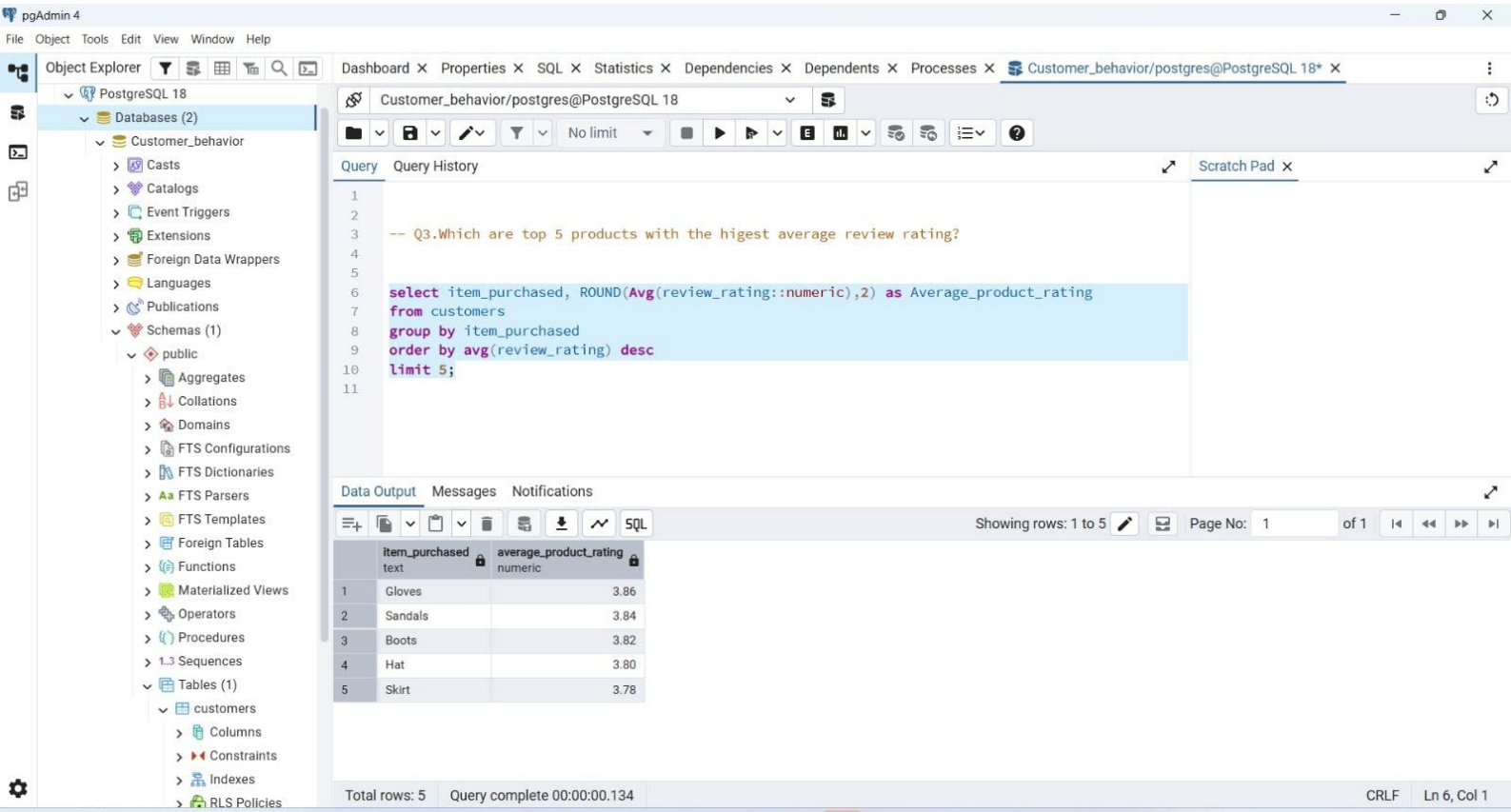
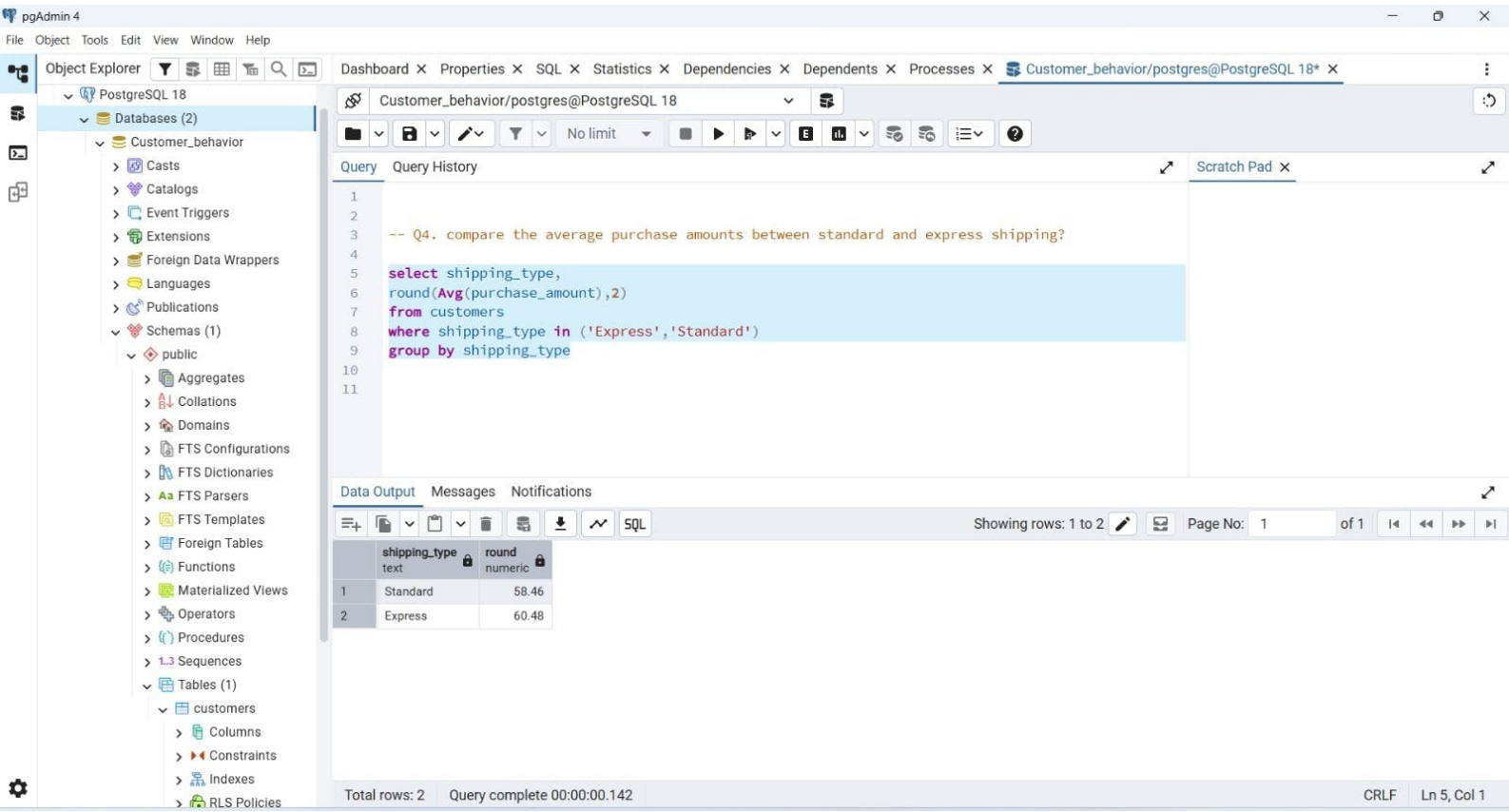
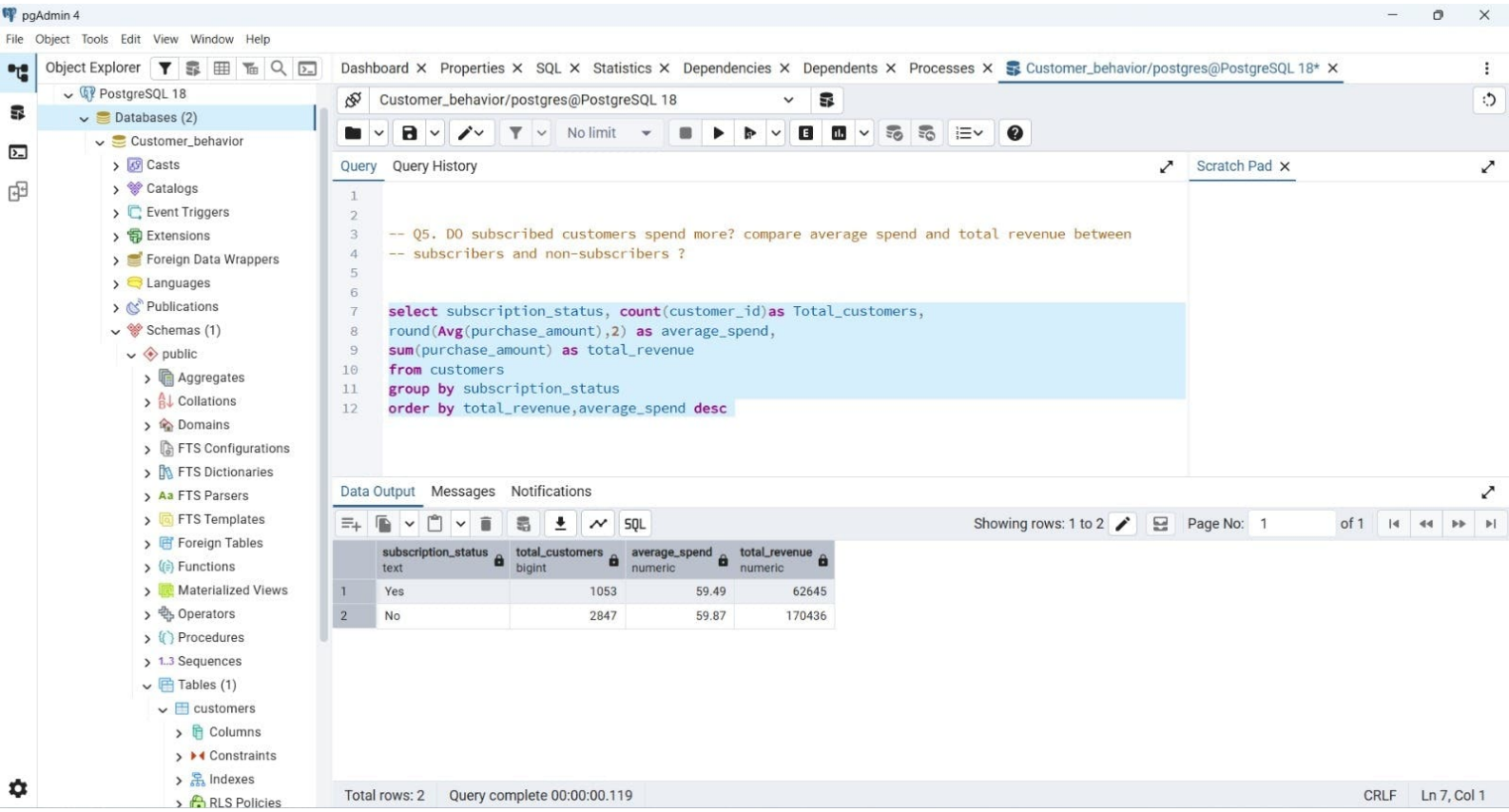
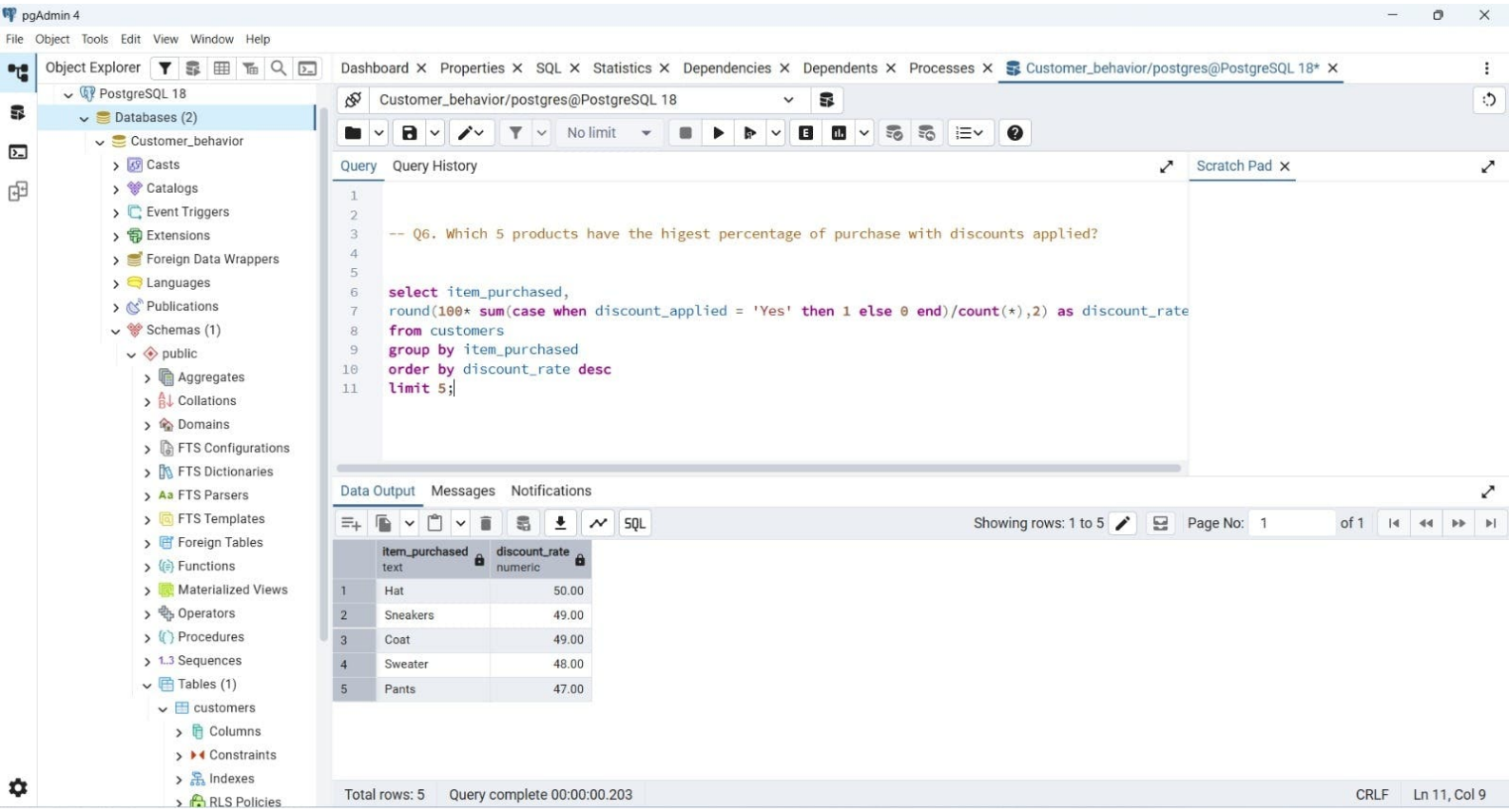

pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
Servers
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q1. What is the total revenue generated by male Vs female customers?
select gender, sum(purchase_amount) as revenue
from customers
group by gender
Data Output
Messages
Notifications
Showing rows: 1 to 2
Page No: 1
of 1
gender text
revenue numeric
1 Female 75191
2 Male 157890
Successfully run. Tota
Total rows: 2
Query complete 00:00:00.217
CRLF
Ln 3, Col 1

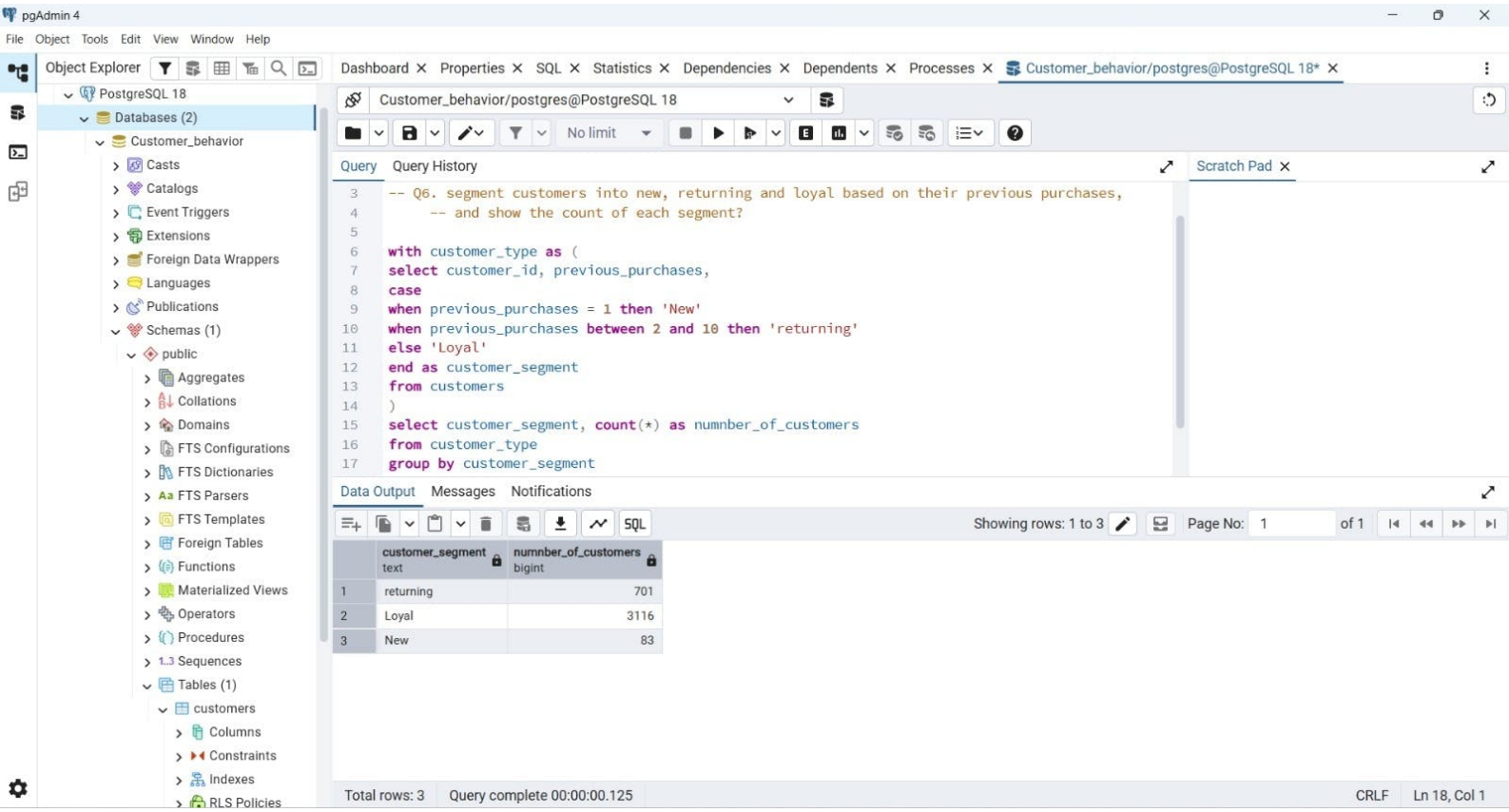

pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q2. which customers used a discount but still spend more than the average purchase amount?
select customer_id, purchase_amount
from customers
where discount_applied = 'Yes' and purchase_amount >=
(select AVG(purchase_amount) from customers)
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 839
Page No: 1
of 1
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
10 22 62
11 24 88
12 29 94
Total rows: 839
Query complete 00:00:00.141
CRLF
Ln 5, Col 1

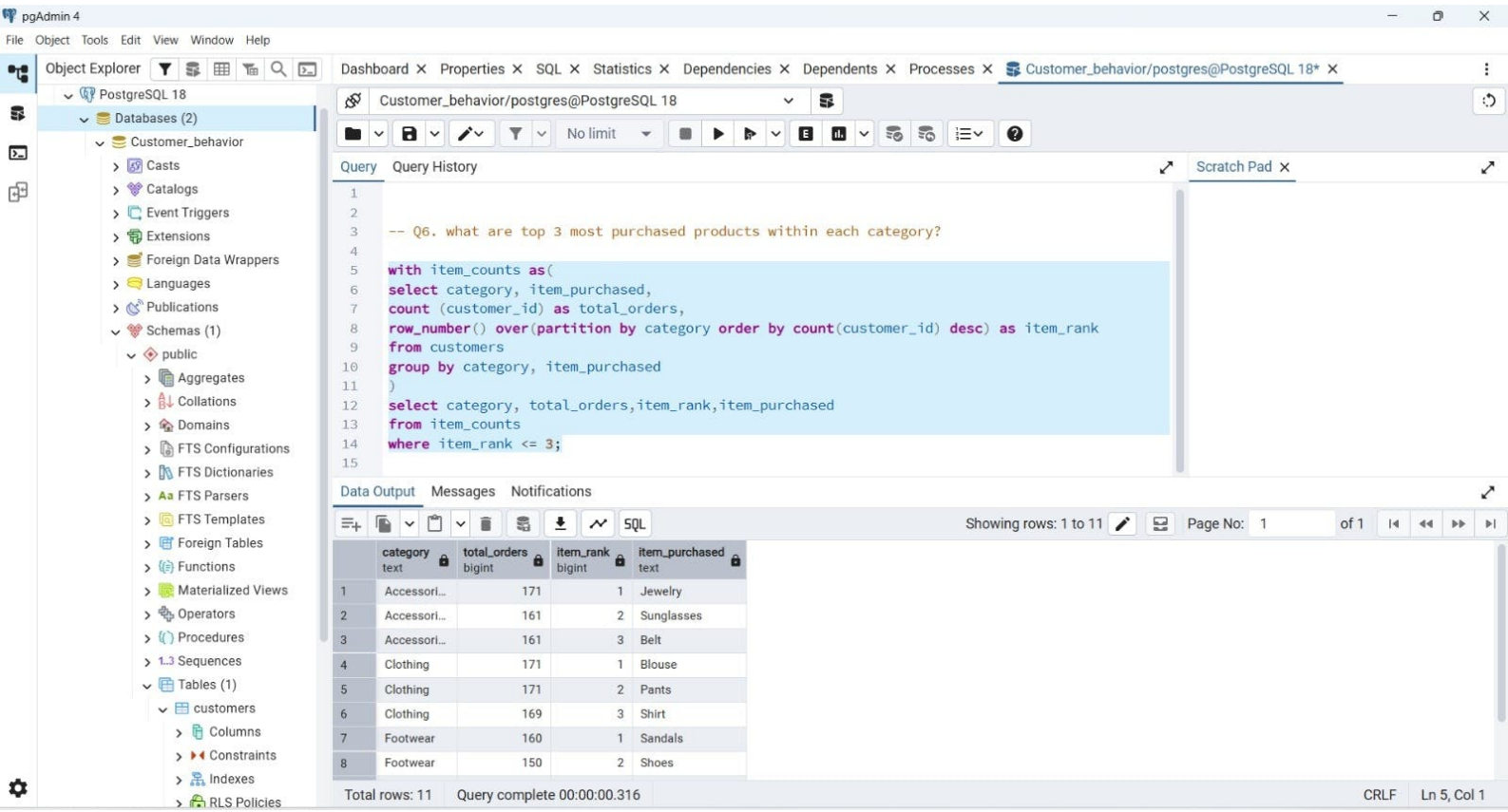

pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q3.Which are top 5 products with the higest average review rating?
select item_purchased, ROUND(Avg(review_rating::numeric),2) as Average_product_rating
from customers
group by item_purchased
order by avg(review_rating) desc
limit 5;
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 5
Page No: 1
of 1
item_purchased text
average_product_rating numeric
1 Gloves 3.86
2 Sandals 3.84
3 Boots 3.82
4 Hat 3.80
5 Skirt 3.78
Total rows: 5
Query complete 00:00:00.134
CRLF
Ln 6, Col 1

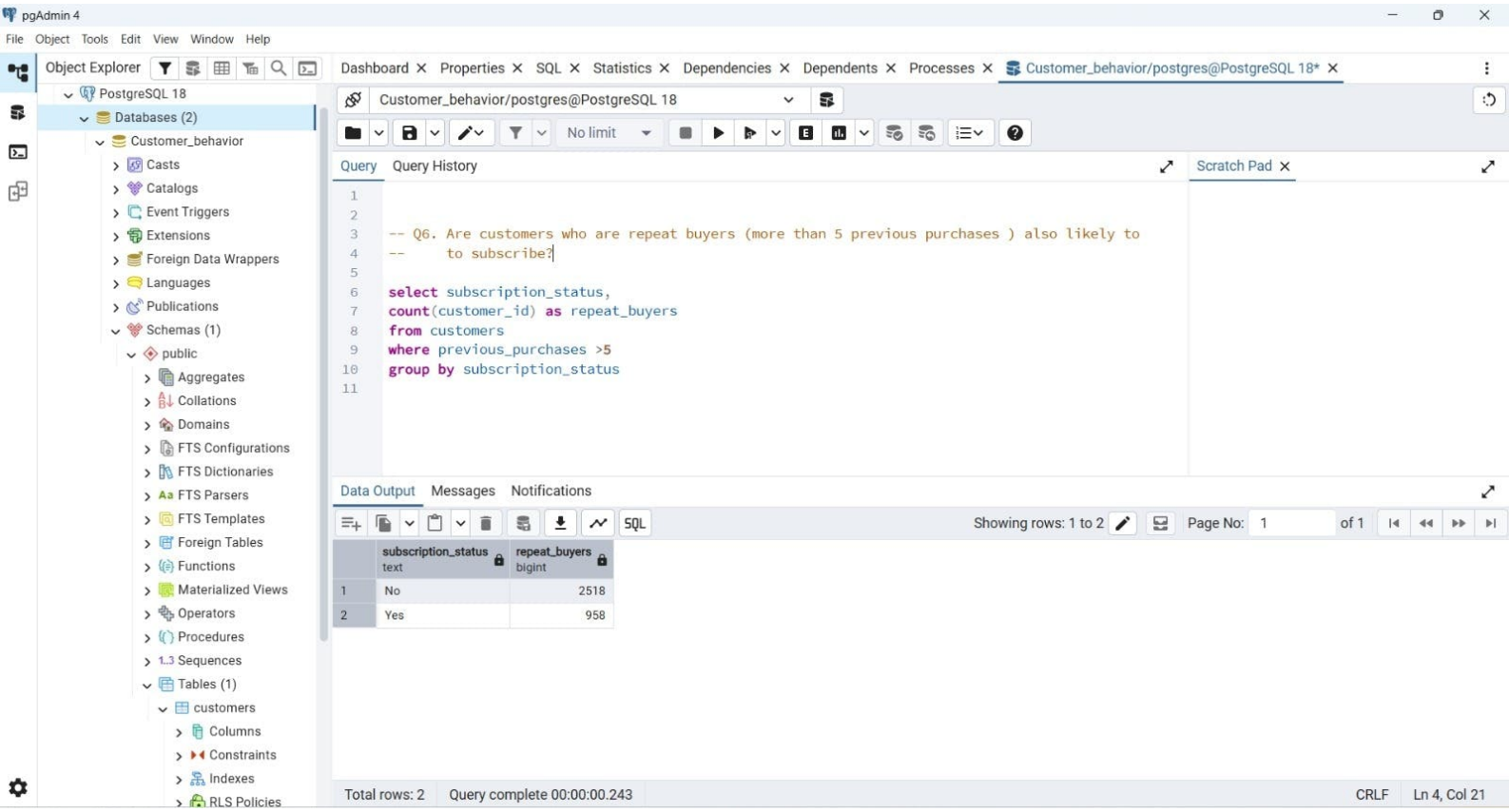

pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
Dashboard Properties SQL Statistics Dependencies Dependents Processes Customer_behavior/postgres@PostgreSQL 18*
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
1
2
3 -- Q4. compare the average purchase amounts between standard and express shipping?
4
5 select shipping_type,
6 round(Avg(purchase_amount),2)
7 from customers
8 where shipping_type in ('Express','Standard')
9 group by shipping_type
10
11
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 2
Page No: 1 of 1
shipping_type text
round numeric
1 Standard 58.46
2 Express 60.48
Total rows: 2
Query complete 00:00:00.142
CRLF
Ln 5, Col 1

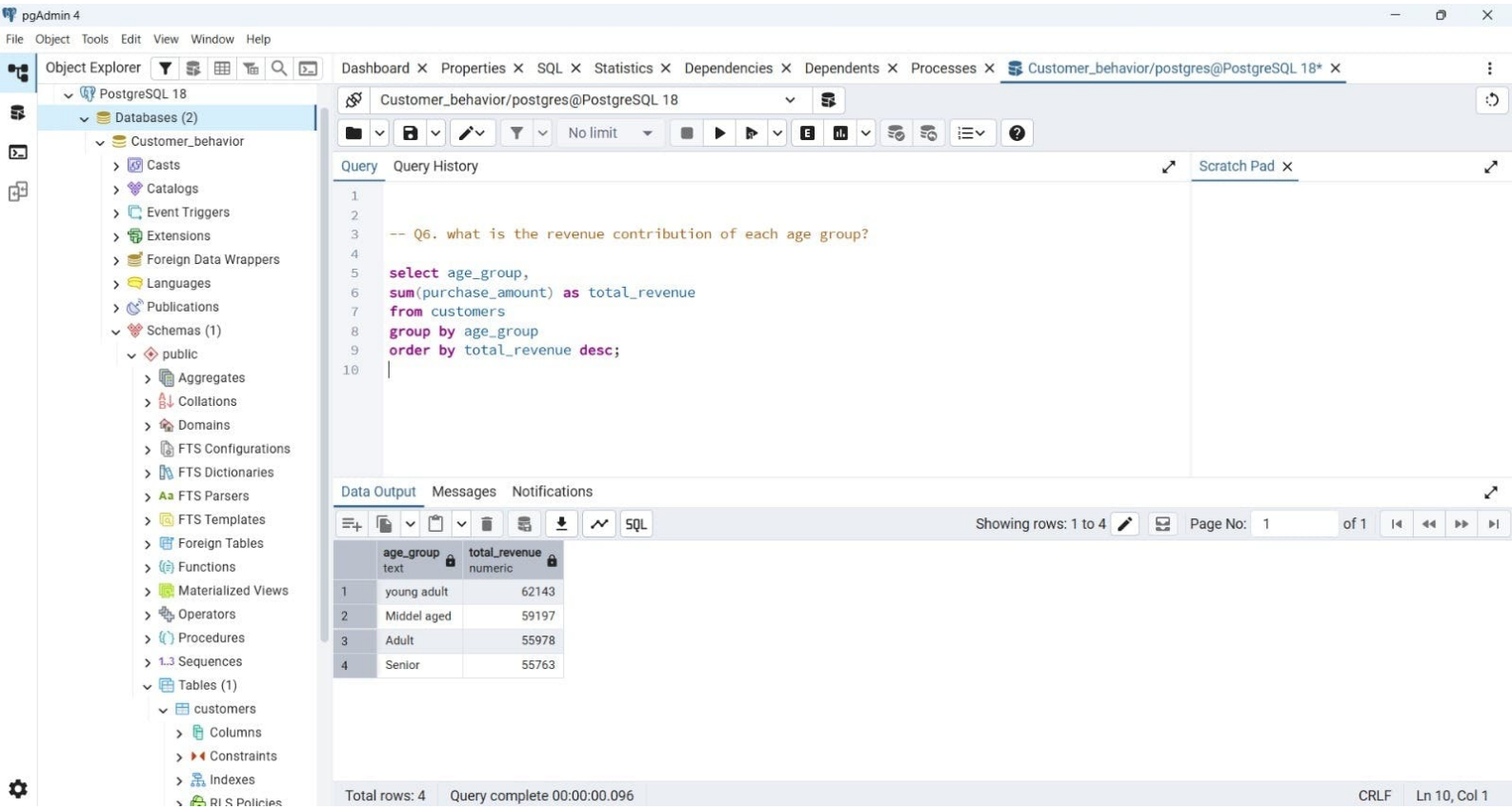

pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
1
2
3 -- Q5. DO subscribed customers spend more? compare average spend and total revenue between
4 -- subscribers and non-subscribers ?
5
6
7 select subscription_status, count(customer_id)as Total_customers,
8 round(Avg(purchase_amount),2) as average_spend,
9 sum(purchase_amount) as total_revenue
10 from customers
11 group by subscription_status
12 order by total_revenue,average_spend desc
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 2
Page No: 1 of 1
subscription_status text
total_customers bigint
average_spend numeric
total_revenue numeric
1 Yes 1053 59.49 62645
2 No 2847 59.87 170436
Total rows: 2
Query complete 00:00:00.119
CRLF
Ln 7, Col 1


pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
1
2
3 -- Q6. Which 5 products have the higest percentage of purchase with discounts applied?
4
5
6 select item_purchased,
7 round(100* sum(case when discount_applied = 'Yes' then 1 else 0 end)/count(*),2) as discount_rate
8 from customers
9 group by item_purchased
10 order by discount_rate desc
11 limit 5;
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 5
Page No: 1 of 1
item_purchased text
discount_rate numeric
1 Hat 50.00
2 Sneakers 49.00
3 Coat 49.00
4 Sweater 48.00
5 Pants 47.00
Total rows: 5
Query complete 00:00:00.203
CRLF
Ln 11, Col 9


pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q6. segment customers into new, returning and loyal based on their 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 customers
)
select customer_segment, count(*) as numnber_of_customers
from customer_type
group by customer_segment
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 3
Page No: 1
of 1
customer_segment text
numnber_of_customers bigint
1 returning 701
2 Loyal 3116
3 New 83
Total rows: 3
Query complete 00:00:00.125
CRLF
Ln 18, Col 1


pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q6. what are 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 customers
group by category, item_purchased
)
select category, total_orders,item_rank,item_purchased
from item_counts
where item_rank <= 3;
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 11
Page No: 1
of 1
category text
total_orders bigint
item_rank bigint
item_purchased text
1 Accessori... 171 1 Jewelry
2 Accessori... 161 2 Sunglasses
3 Accessori... 161 3 Belt
4 Clothing 171 1 Blouse
5 Clothing 171 2 Pants
6 Clothing 169 3 Shirt
7 Footwear 160 1 Sandals
8 Footwear 150 2 Shoes
Total rows: 11
Query complete 00:00:00.316
CRLF
Ln 5, Col 1


pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
1
2
3 -- Q6. Are customers who are repeat buyers (more than 5 previous purchases ) also likely to
4 -- to subscribe?
5
6 select subscription_status,
7 count(customer_id) as repeat_buyers
8 from customers
9 where previous_purchases >5
10 group by subscription_status
11
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 2
Page No: 1 of 1
subscription_status text
repeat_buyers bigint
1 No 2518
2 Yes 958
Total rows: 2
Query complete 00:00:00.243
CRLF
Ln 4, Col 21


pgAdmin 4
File Object Tools Edit View Window Help
Object Explorer
PostgreSQL 18
Databases (2)
Customer_behavior
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (1)
customers
Columns
Constraints
Indexes
RLS Policies
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Customer_behavior/postgres@PostgreSQL 18*
Customer_behavior/postgres@PostgreSQL 18
No limit
Query
Query History
Scratch Pad
-- Q6. what is the revenue contribution of each age group?
select age_group,
sum(purchase_amount) as total_revenue
from customers
group by age_group
order by total_revenue desc;
Data Output
Messages
Notifications
SQL
Showing rows: 1 to 4
Page No: 1 of 1
age_group text
total_revenue numeric
1 young adult 62143
2 Middel aged 59197
3 Adult 55978
4 Senior 55763
Total rows: 4
Query complete 00:00:00.096
CRLF
Ln 10, Col 1