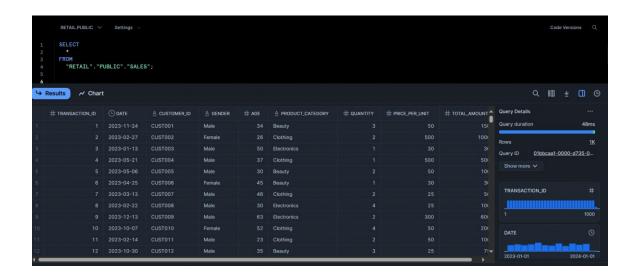
#### SELECT Statement

Q1. Display all columns for all transactions.

Expected output: All columns



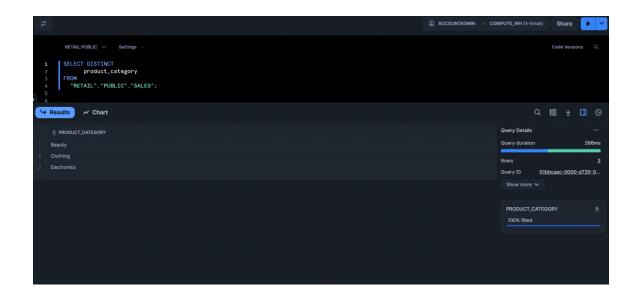
**Q2.** Display only the Transaction ID, Date, and Customer ID for all records. *Expected output:* Transaction ID, Date, Customer ID



#### SELECT DISTINCT Statement

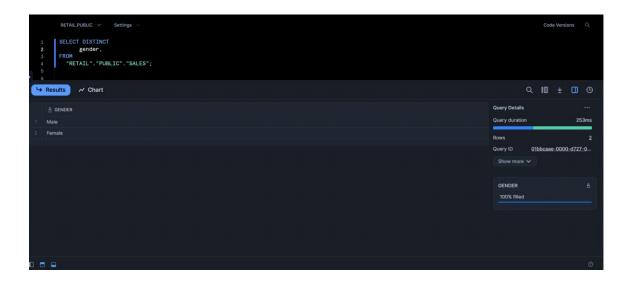
Q3. Display all the distinct product categories in the dataset.

Expected output: Product Category



 ${\bf Q4.}$  Display all the distinct gender values in the dataset.

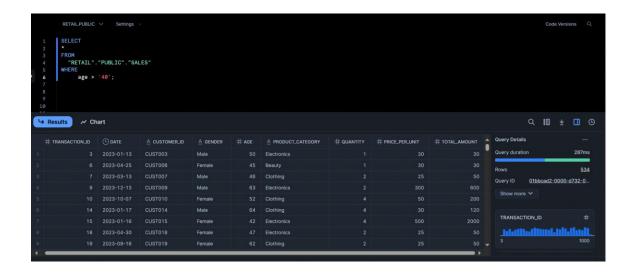
Expected output: Gender



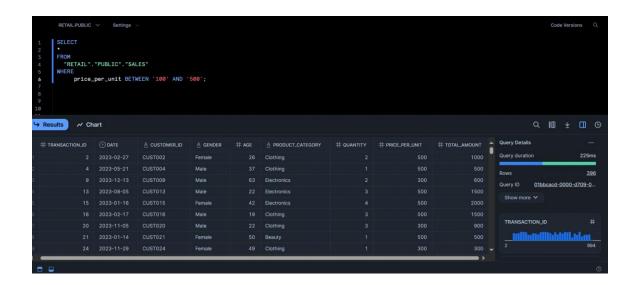
## • WHERE Clause

 $\boldsymbol{\mathsf{Q5.}}$  Display all transactions where the Age is greater than 40.

Expected output: All columns

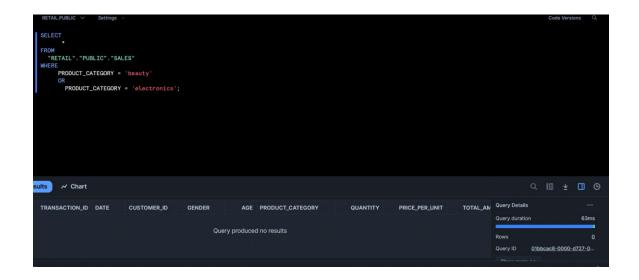


**Q6.** Display all transactions where the Price per Unit is between 100 and 500. *Expected output:* All columns

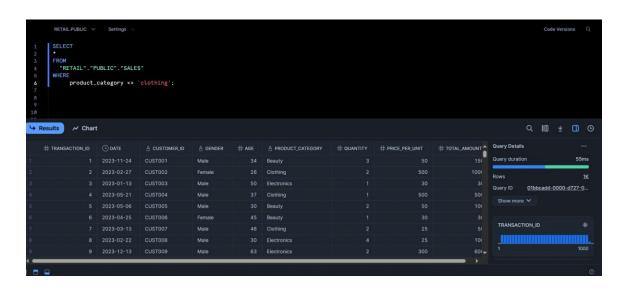


**Q7.** Display all transactions where the Product Category is either 'Beauty' or 'Electronics'.

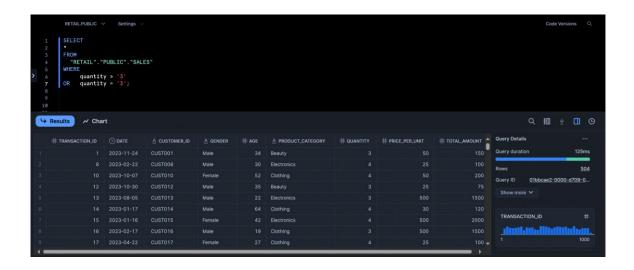
Expected output: All columns



**Q8.** Display all transactions where the Product Category is **not** 'Clothing'. *Expected output*: All columns



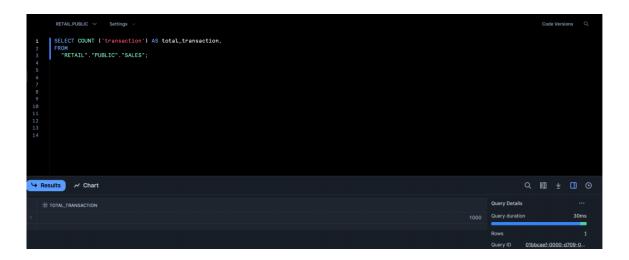
**Q9.** Display all transactions where the Quantity is greater than or equal to 3. *Expected output:* All columns



# • Aggregate Functions

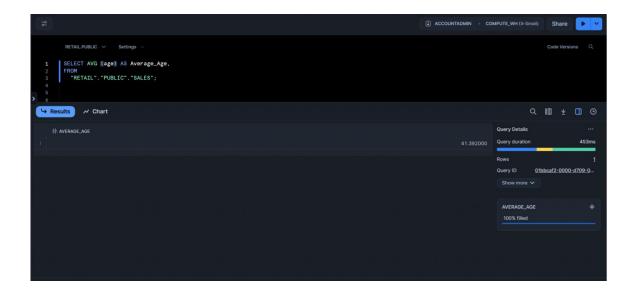
Q10. Count the total number of transactions.

Expected output: Total\_Transactions

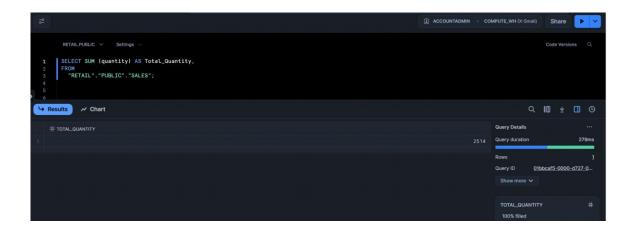


Q11. Find the average Age of customers.

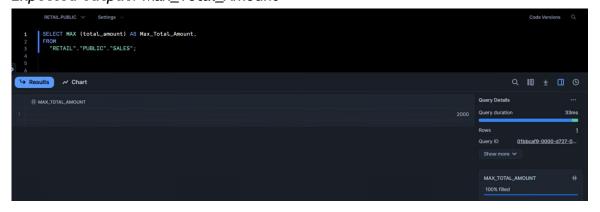
Expected output: Average\_Age



**Q12.** Find the total quantity of products sold. *Expected output:* Total\_Quantity



**Q13.** Find the maximum Total Amount spent in a single transaction. *Expected output:* Max\_Total\_Amount



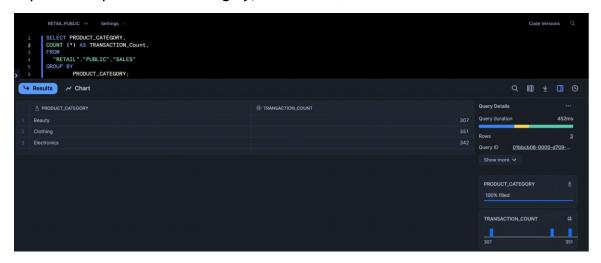
Q14. Find the minimum Price per Unit in the dataset.

Expected output: Min\_Price\_per\_Unit



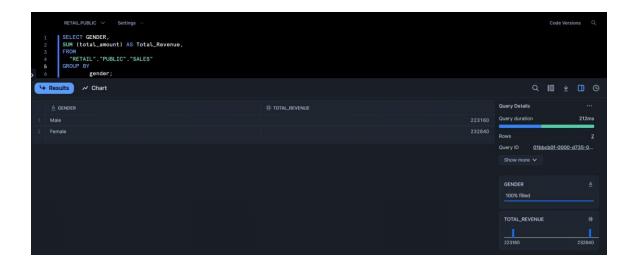
### GROUP BY Statement

**Q15.** Find the number of transactions per Product Category. *Expected output:* Product Category, Transaction\_Count

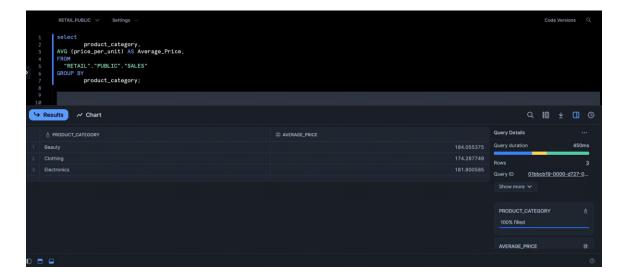


 ${\bf Q16.}$  Find the total revenue (Total Amount) per gender.

Expected output: Gender, Total\_Revenue



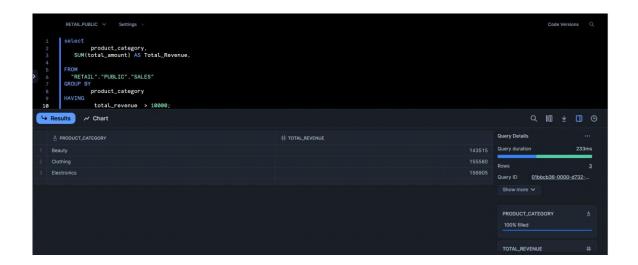
**Q17.** Find the average Price per Unit per product category. *Expected output:* Product Category, Average\_Price



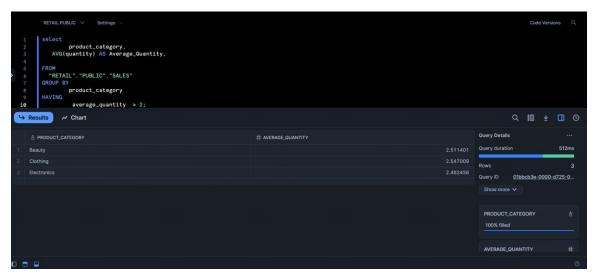
## • HAVING Clause

**Q18.** Find the total revenue per product category where total revenue is greater than 10,000.

Expected output: Product Category, Total\_Revenue



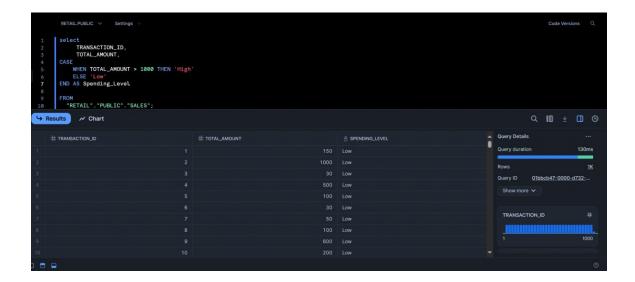
**Q19.** Find the average quantity per product category where the average is more than 2. *Expected output:* Product Category, Average\_Quantity



### CASE Statement

**Q20.** Display a column called Spending\_Level that shows 'High' if Total Amount > 1000, otherwise 'Low'.

Expected output: Transaction ID, Total Amount, Spending\_Level



Q21. Display a new column called Age\_Group that labels customers as:

- 'Youth' if Age < 30
- 'Adult' if Age is between 30 and 59
- 'Senior' if Age >= 60
   Expected output: Customer ID, Age, Age\_Group

