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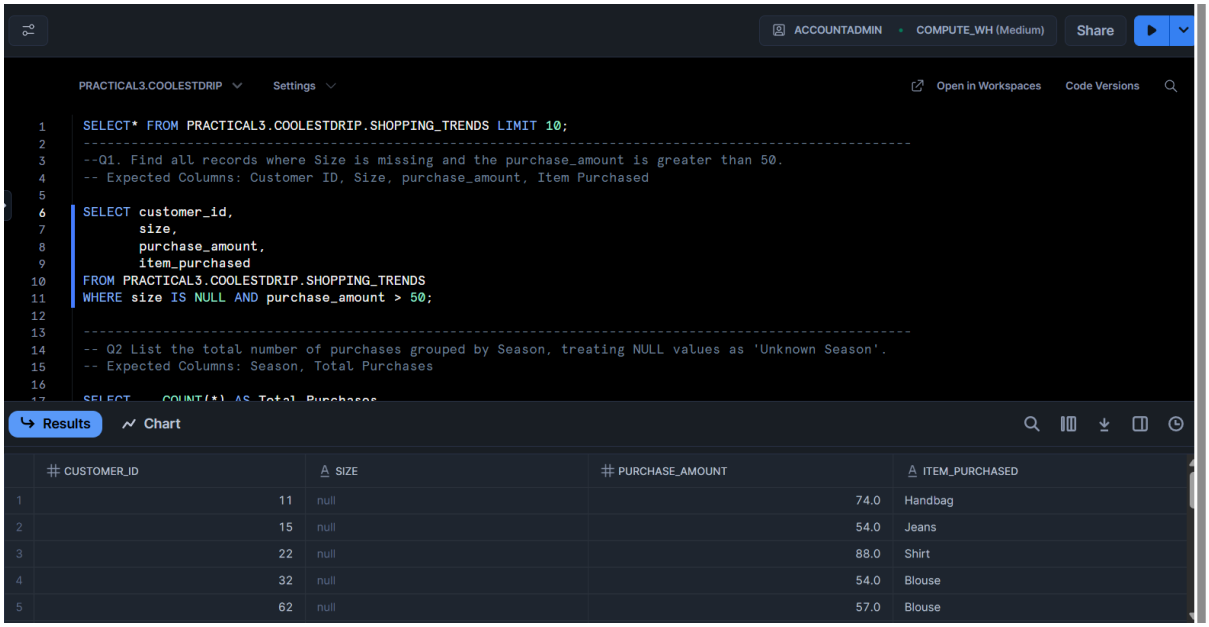
BrightLight Data Analytics Coding Practical 3

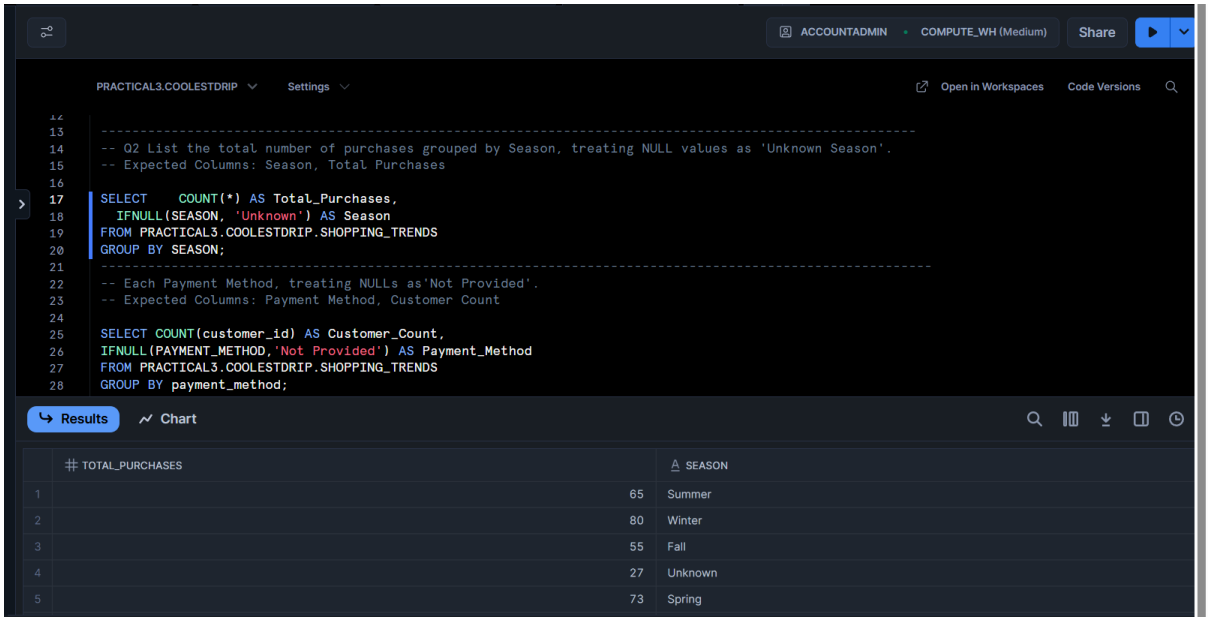
--Q1. Find all records where Size is missing and the purchase_amount is greater than 50.

-- Expected Columns: Customer ID, Size, purchase_amount, Item Purchased



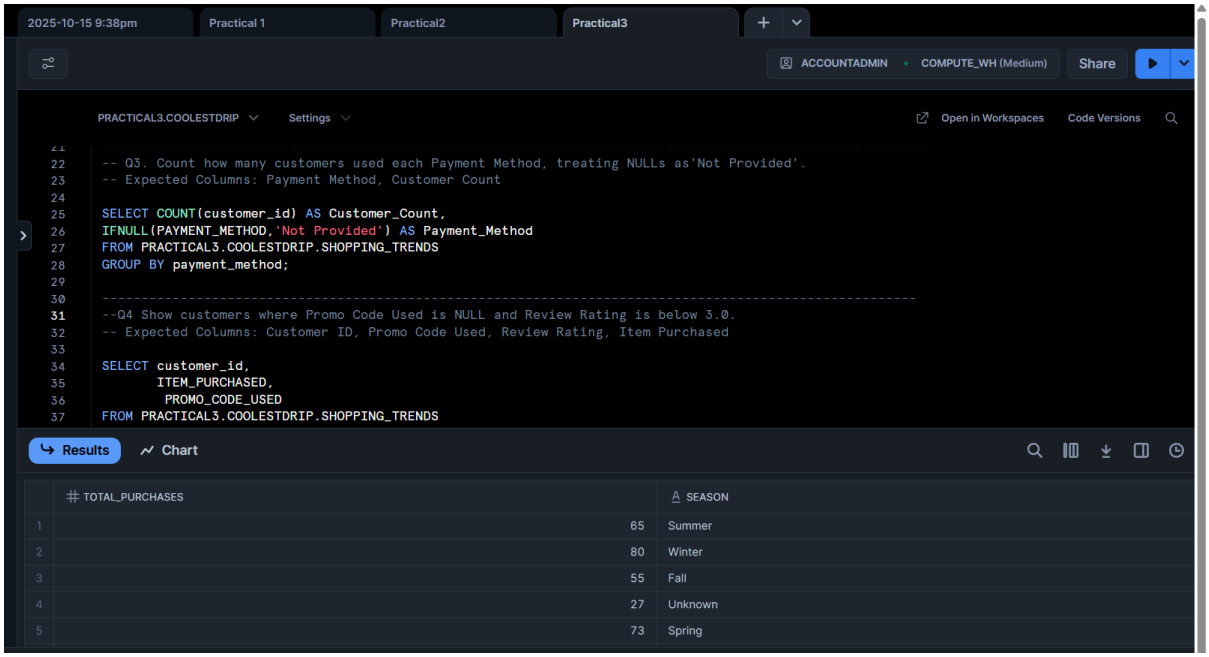
-- Q2 List the total number of purchases grouped by Season, treating NULL values as 'Unknown Season'.

-- Expected Columns: Season, Total Purchases



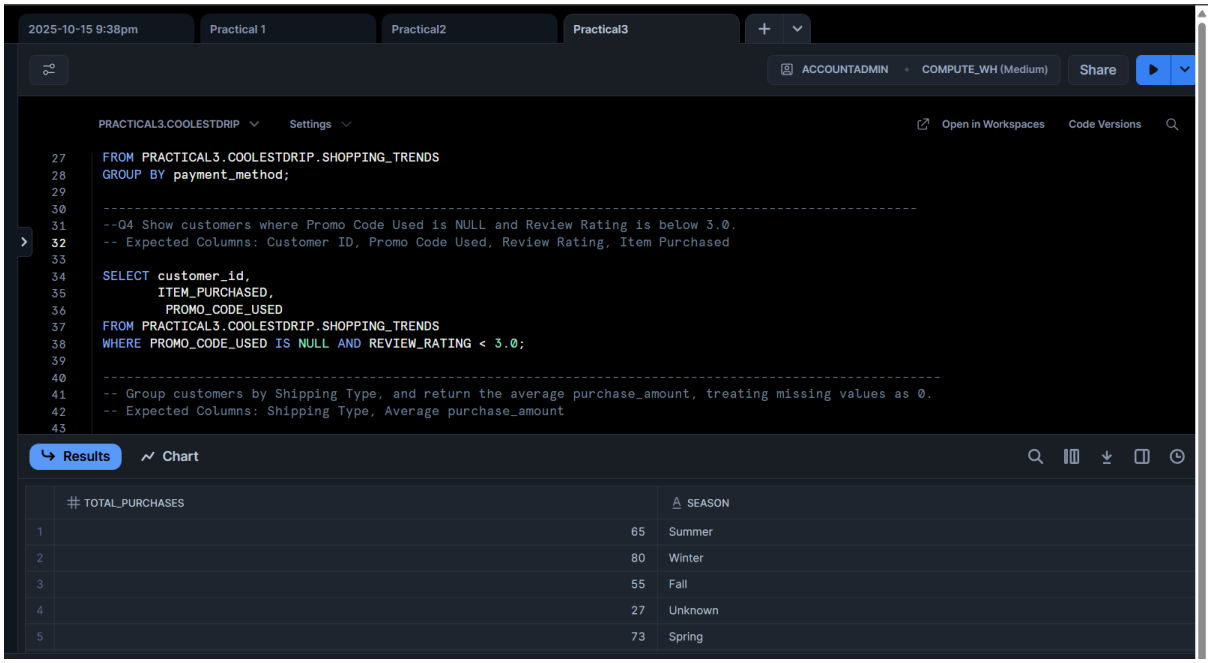
-- Q3. Count how many customers used each Payment Method, treating NULLs as'Not Provided'.

-- Expected Columns: Payment Method, Customer Count



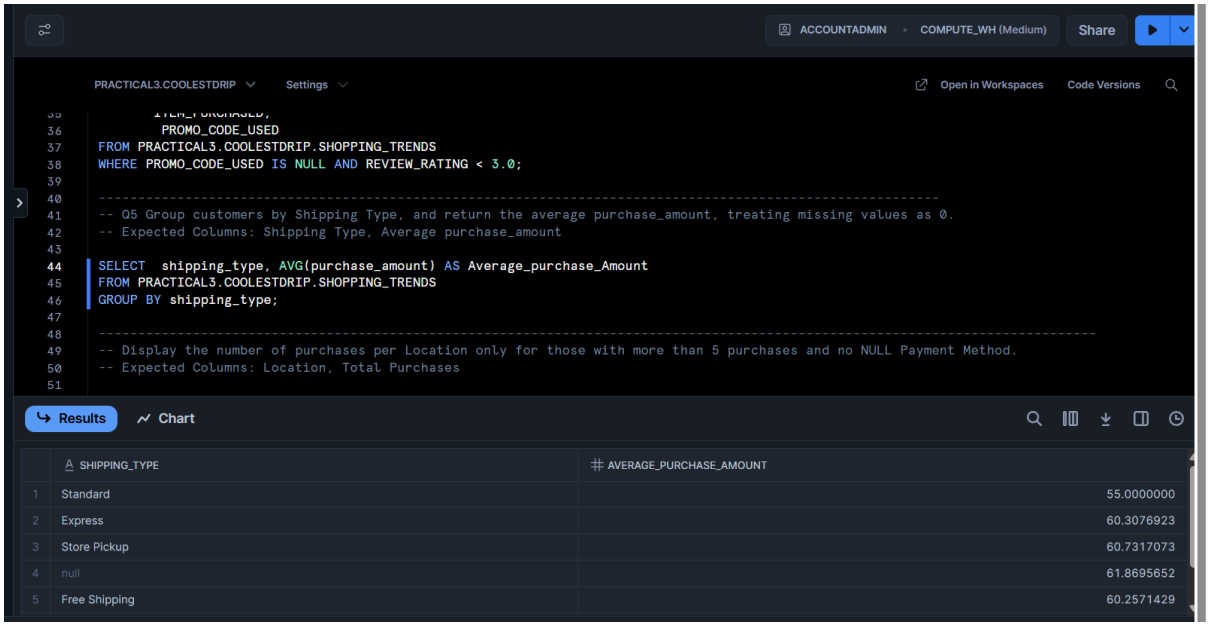
--Q4 Show customers where Promo Code Used is NULL and Review Rating is below 3.0.

-- Expected Columns: Customer ID, Promo Code Used, Review Rating, Item Purchased



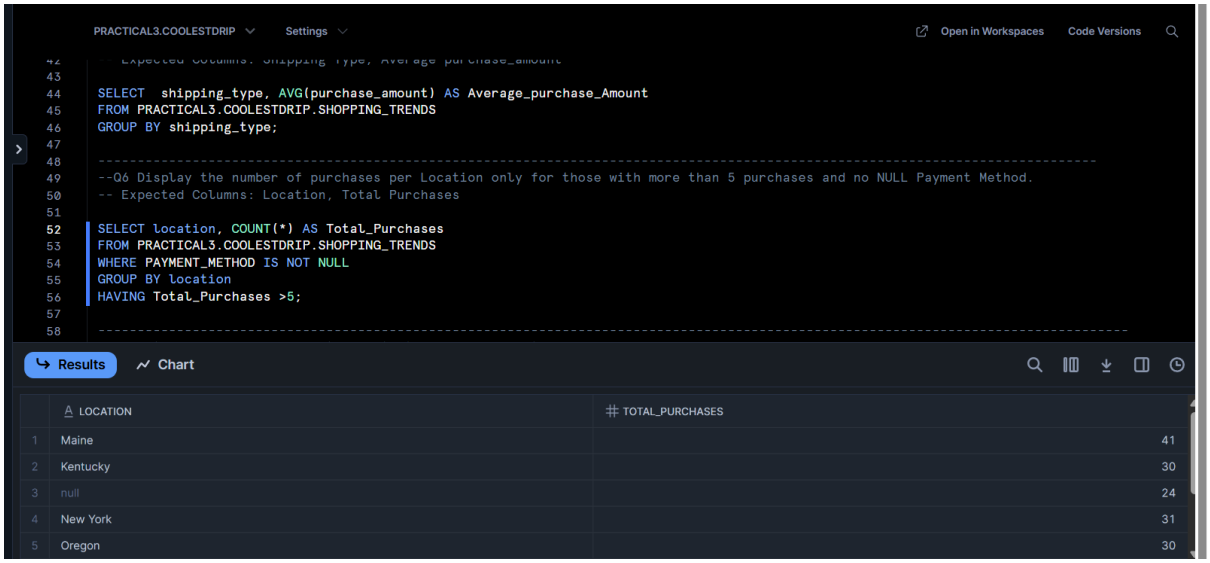
-- Q5 Group customers by Shipping Type, and return the average purchase_amount, treating missing values as 0.

-- Expected Columns: Shipping Type, Average purchase_amount



--Q6 Display the number of purchases per Location only for those with more than 5 purchases and no NULL Payment Method.

-- Expected Columns: Location, Total Purchases

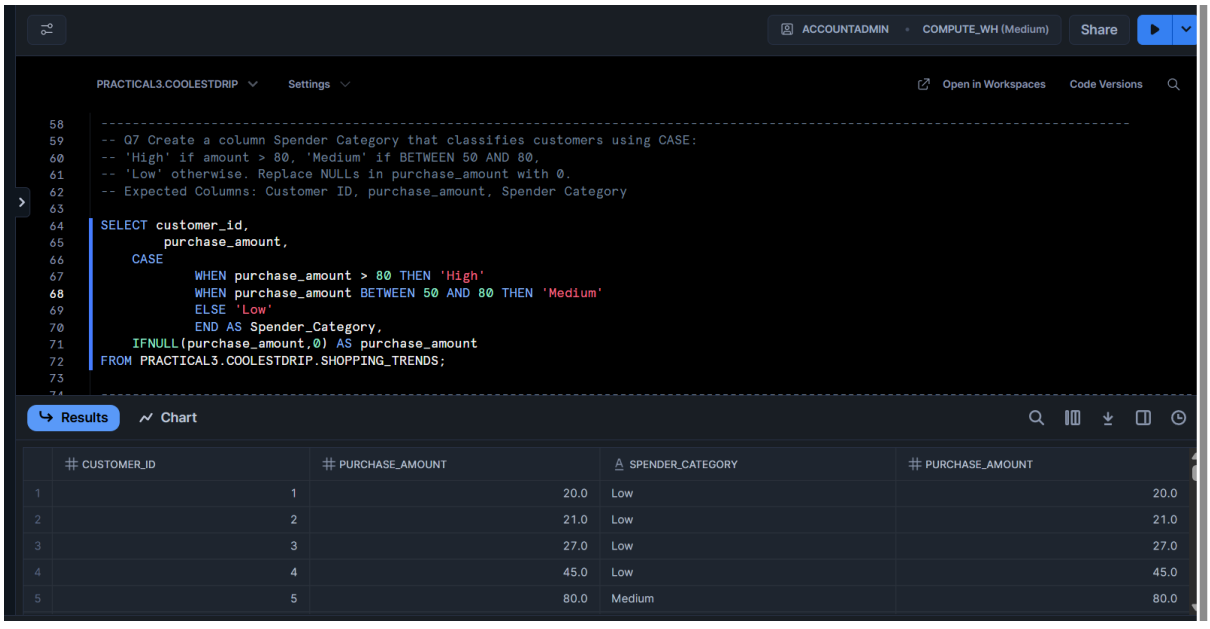


-- Q7 Create a column Spender Category that classifies customers using CASE:

-- 'High' if amount > 80, 'Medium' if BETWEEN 50 AND 80,

-- 'Low' otherwise. Replace NULLs in purchase_amount with 0.

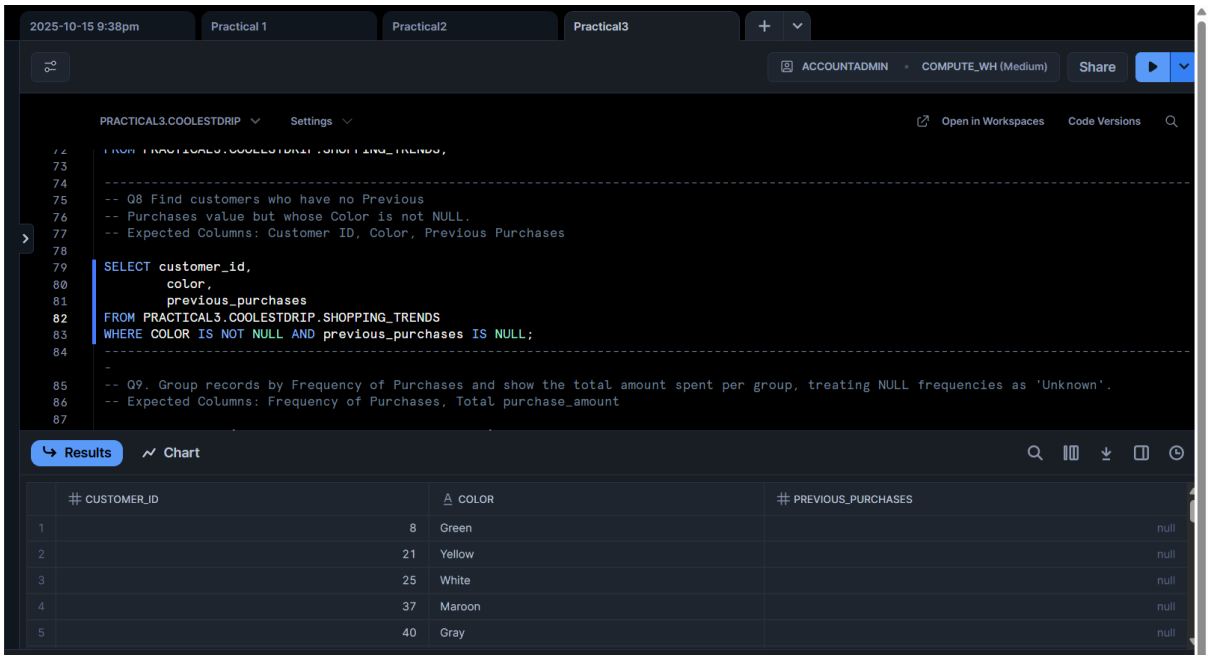
-- Expected Columns: Customer ID, purchase_amount, Spender Category



-- Q8 Find customers who have no Previous

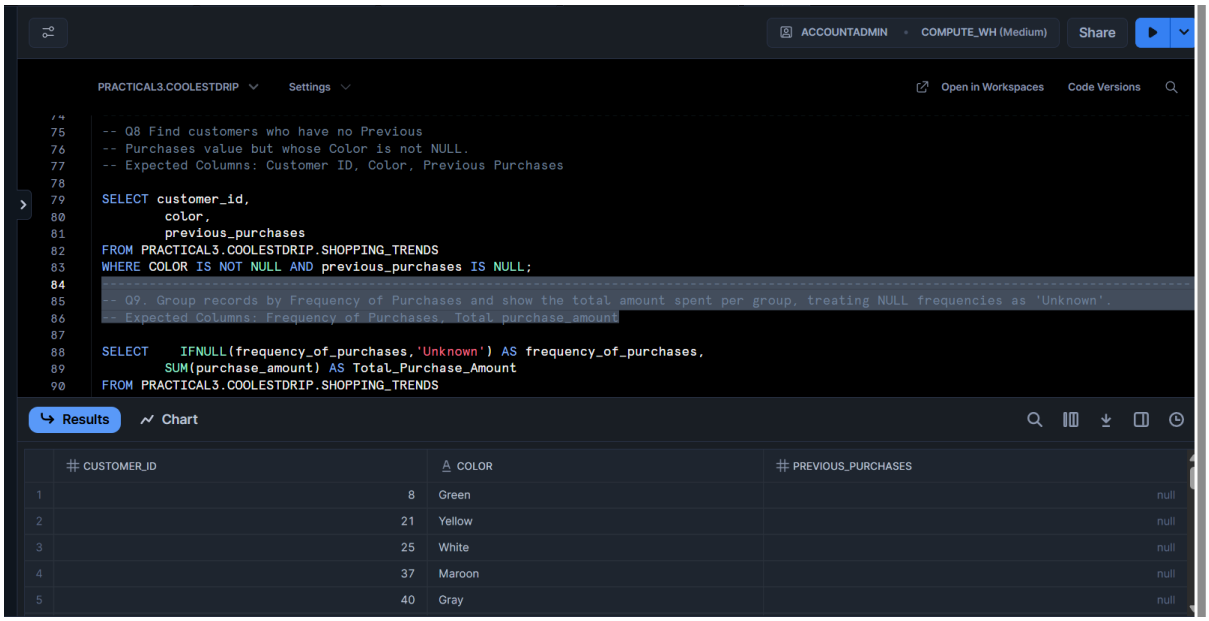
-- Purchases value but whose Color is not NULL.

-- Expected Columns: Customer ID, Color, Previous Purchases



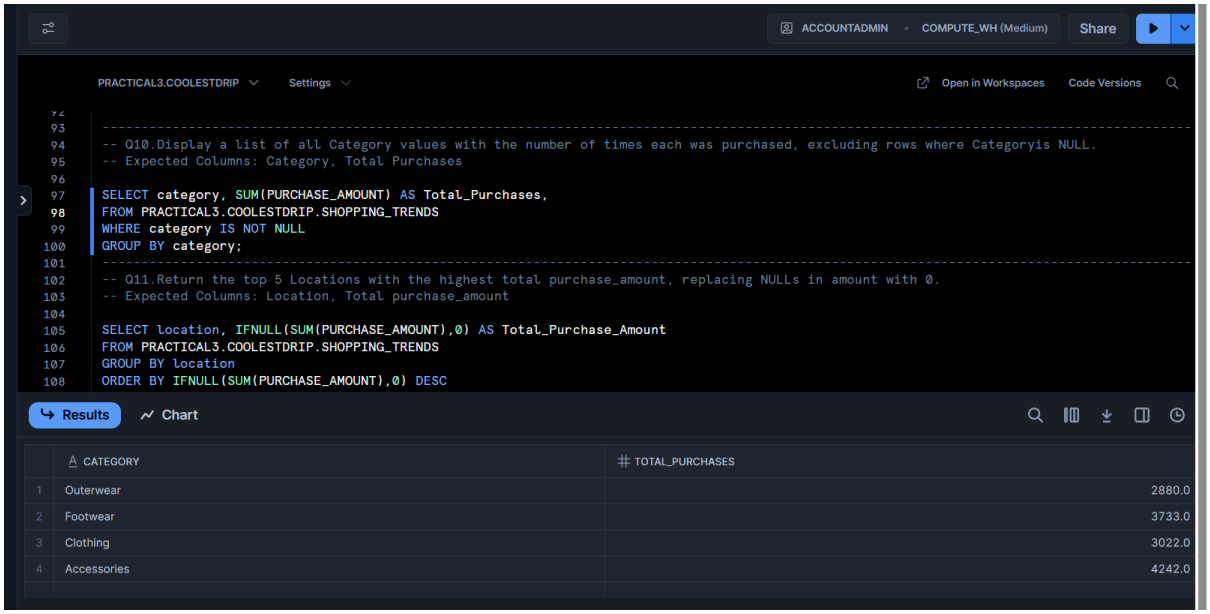
-- Q9. Group records by Frequency of Purchases and show the total amount spent per group, treating NULL frequencies as 'Unknown'.

-- Expected Columns: Frequency of Purchases, Total purchase_amount



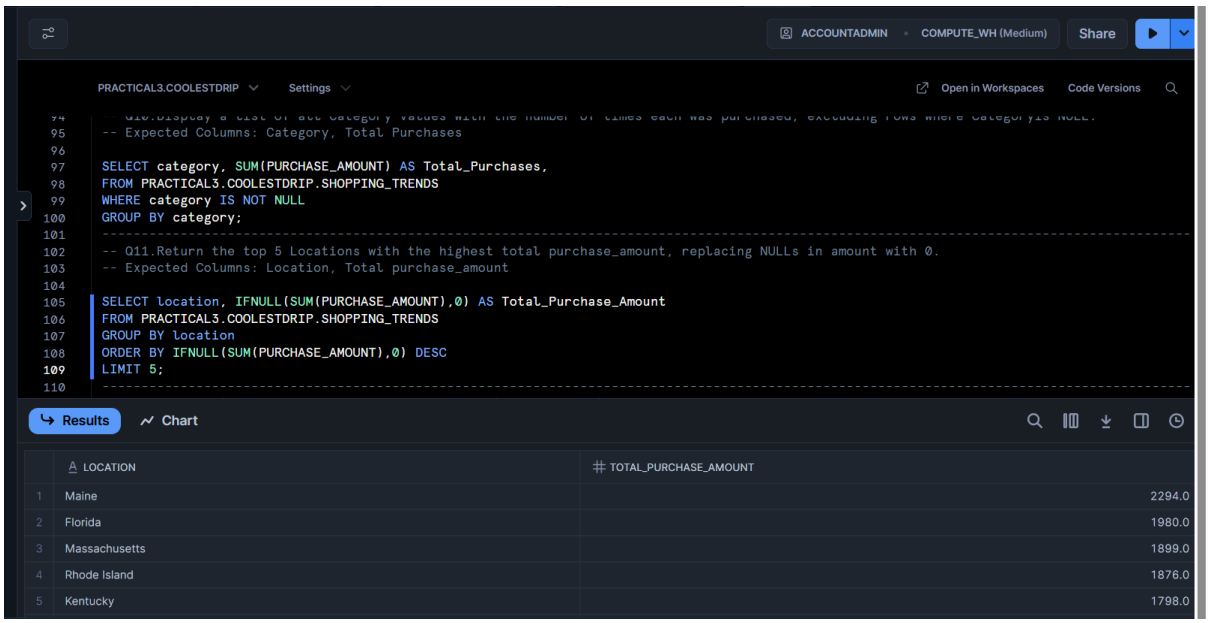
-- Q10.Display a list of all Category values with the number of times each was purchased, excluding rows where Categoryis NULL.

-- Expected Columns: Category, Total Purchases



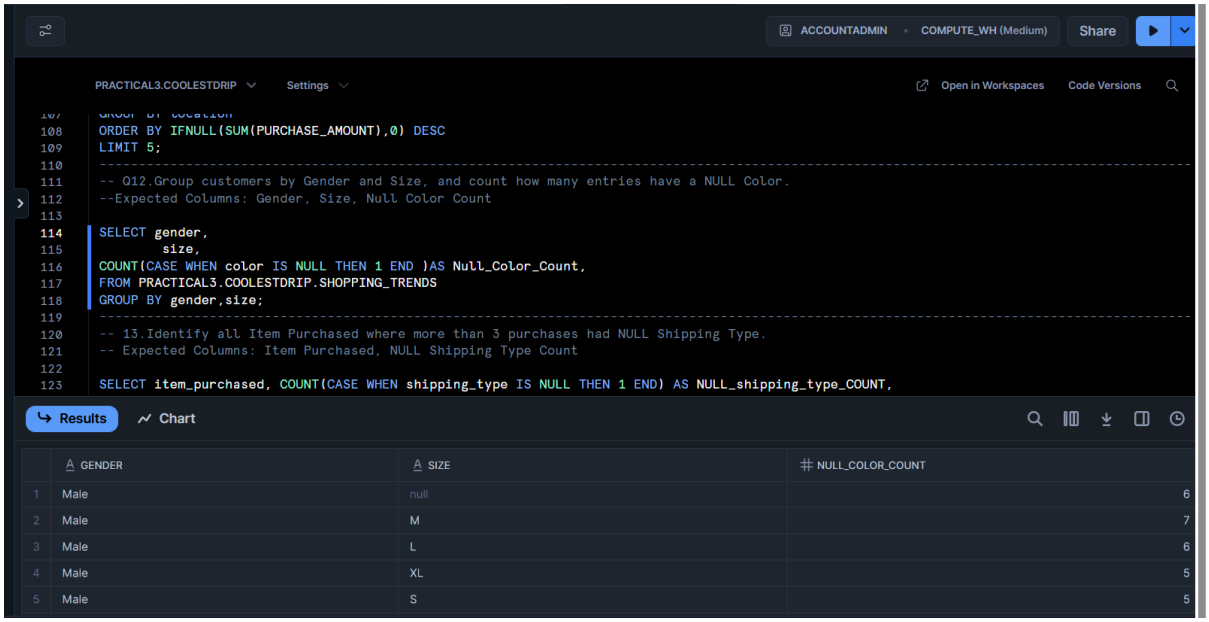
-- Q11.Return the top 5 Locations with the highest total purchase_amount, replacing NULLs in amount with 0.

-- Expected Columns: Location, Total purchase_amount



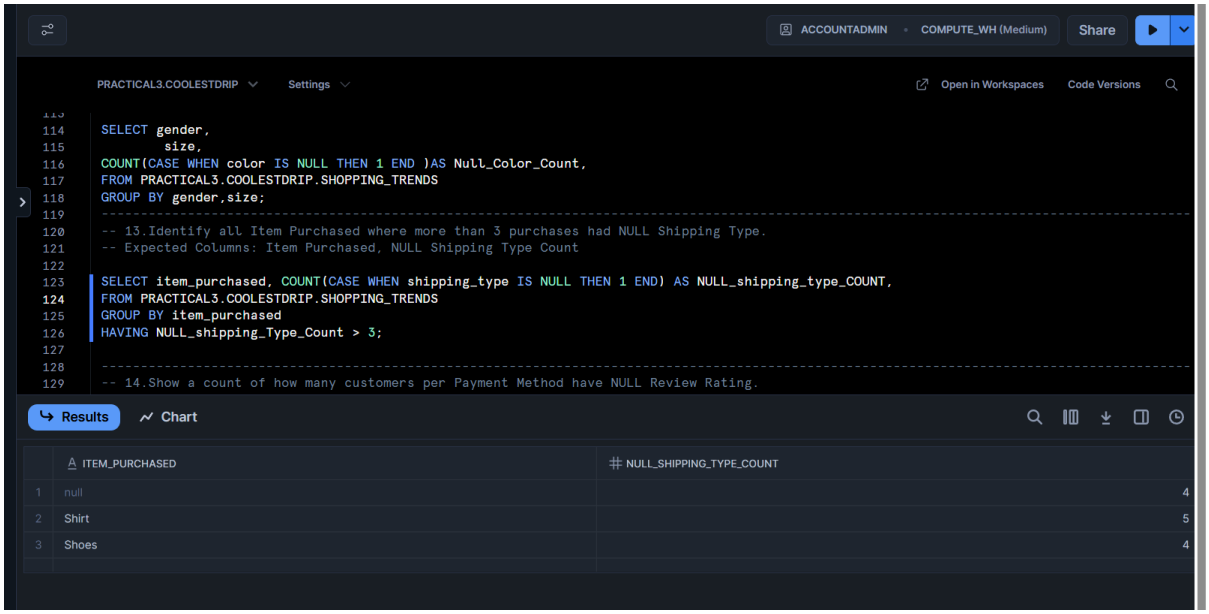
-- Q12.Group customers by Gender and Size, and count how many entries have a NULL Color.

--Expected Columns: Gender, Size, Null Color Count



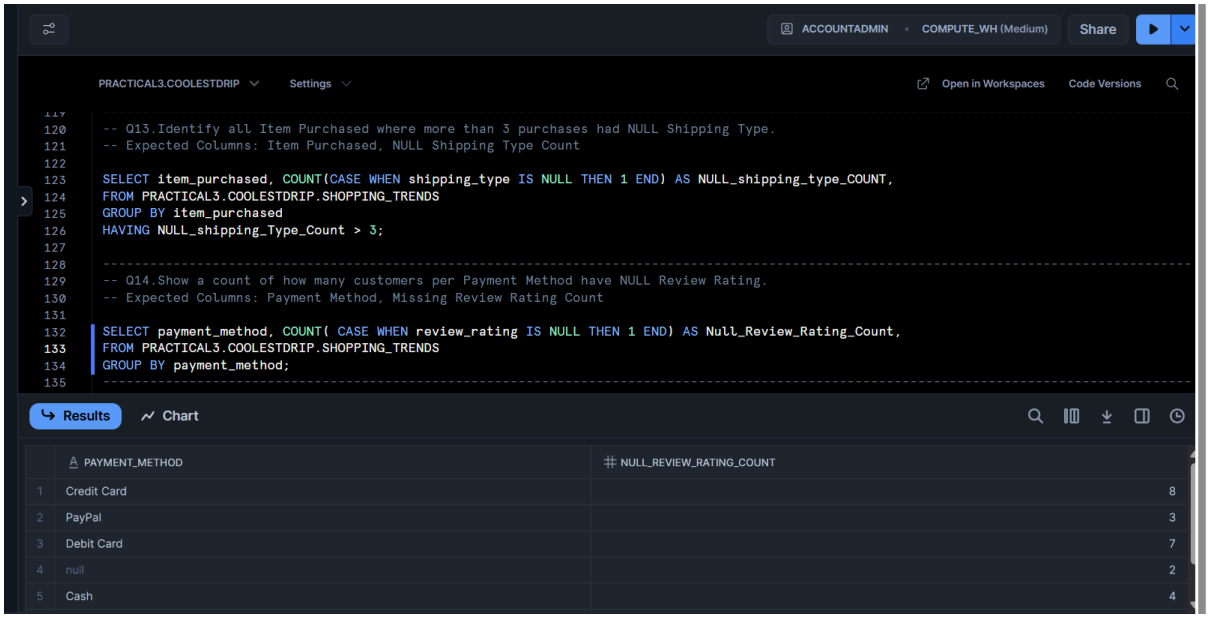
-- Q13.Identify all Item Purchased where more than 3 purchases had NULL Shipping Type.

-- Expected Columns: Item Purchased, NULL Shipping Type Count



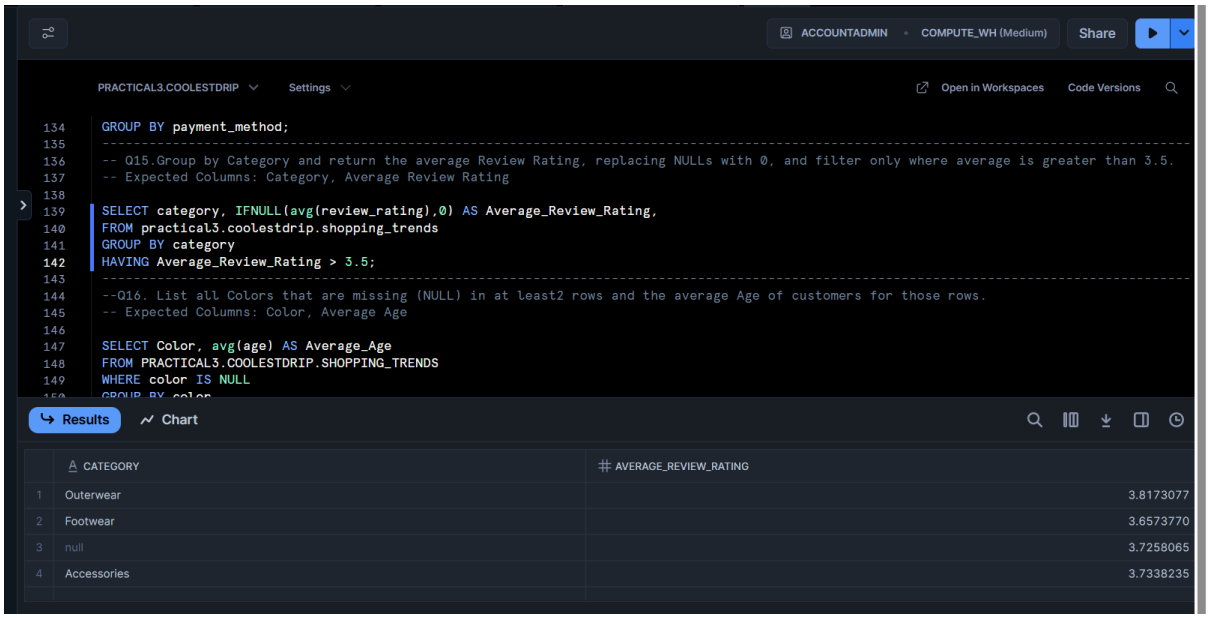
-- Q14.Show a count of how many customers per Payment Method have NULL Review Rating.

-- Expected Columns: Payment Method, Missing Review Rating Count



-- Q15.Group by Category and return the average Review Rating, replacing NULLs with 0, and filter only where average is greater than 3.5.

-- Expected Columns: Category, Average Review Rating



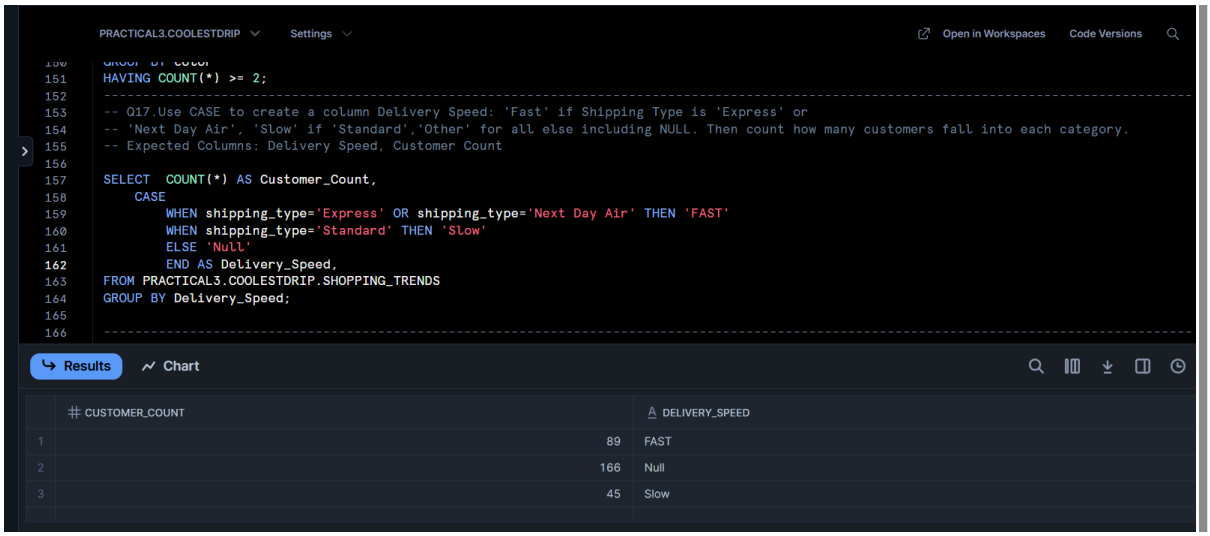
--Q16. List all Colors that are missing (NULL) in at least2 rows and the average Age of customers for those rows.

-- Expected Columns: Color, Average Age

--Q17.Use CASE to create a column Delivery Speed: 'Fast' if Shipping Type is 'Express' or

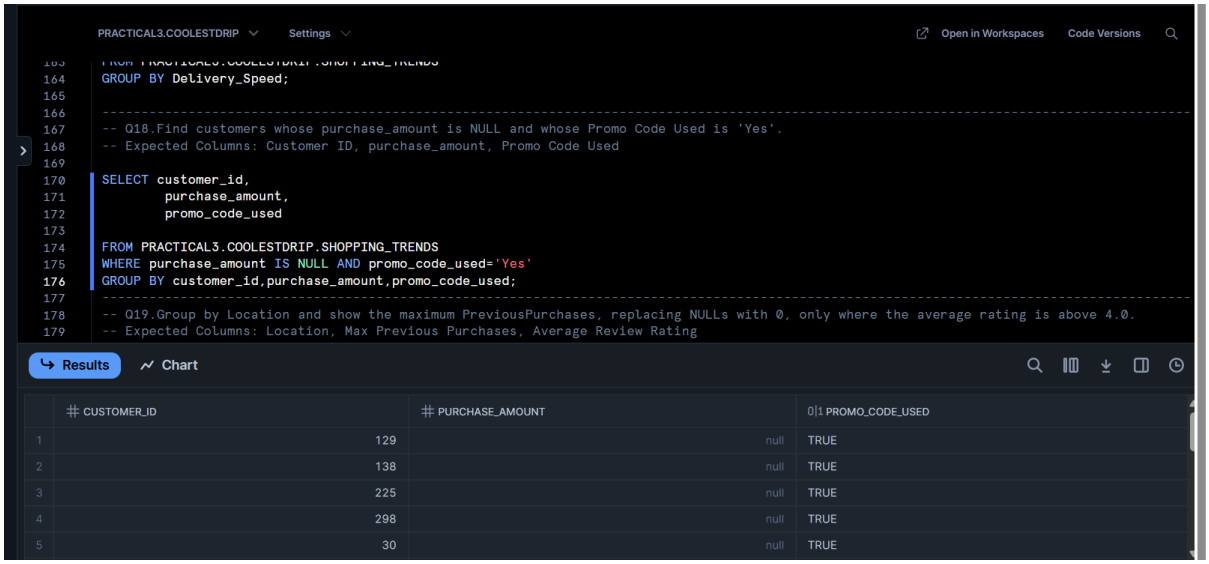
-- 'Next Day Air', 'Slow' if 'Standard','Other' for all else including NULL. Then count how many customers fall into each category.

-- Expected Columns: Delivery Speed, Customer Count



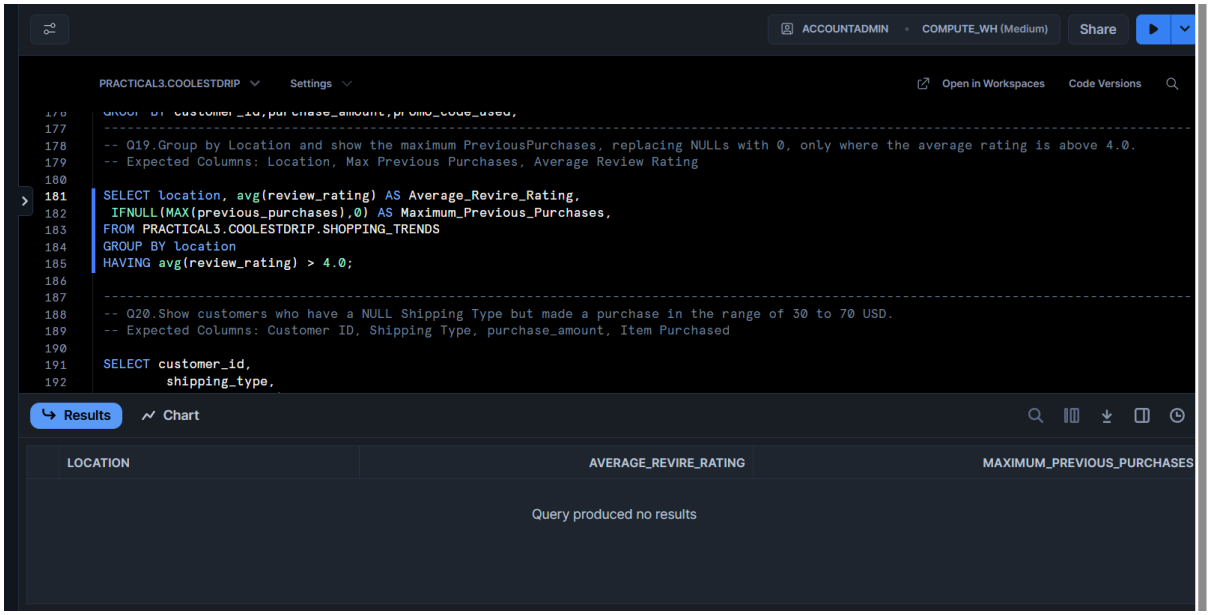
-- Q18.Find customers whose purchase_amount is NULL and whose Promo Code Used is 'Yes'.

-- Expected Columns: Customer ID, purchase_amount, Promo Code Used



-- Q19.Group by Location and show the maximum PreviousPurchases, replacing NULLs with 0, only where the average rating is above 4.0.

-- Expected Columns: Location, Max Previous Purchases, Average Review Rating



-- Q20.Show customers who have a NULL Shipping Type but made a purchase in the range of 30 to 70 USD.

-- Expected Columns: Customer ID, Shipping Type, purchase_amount, Item Purchased