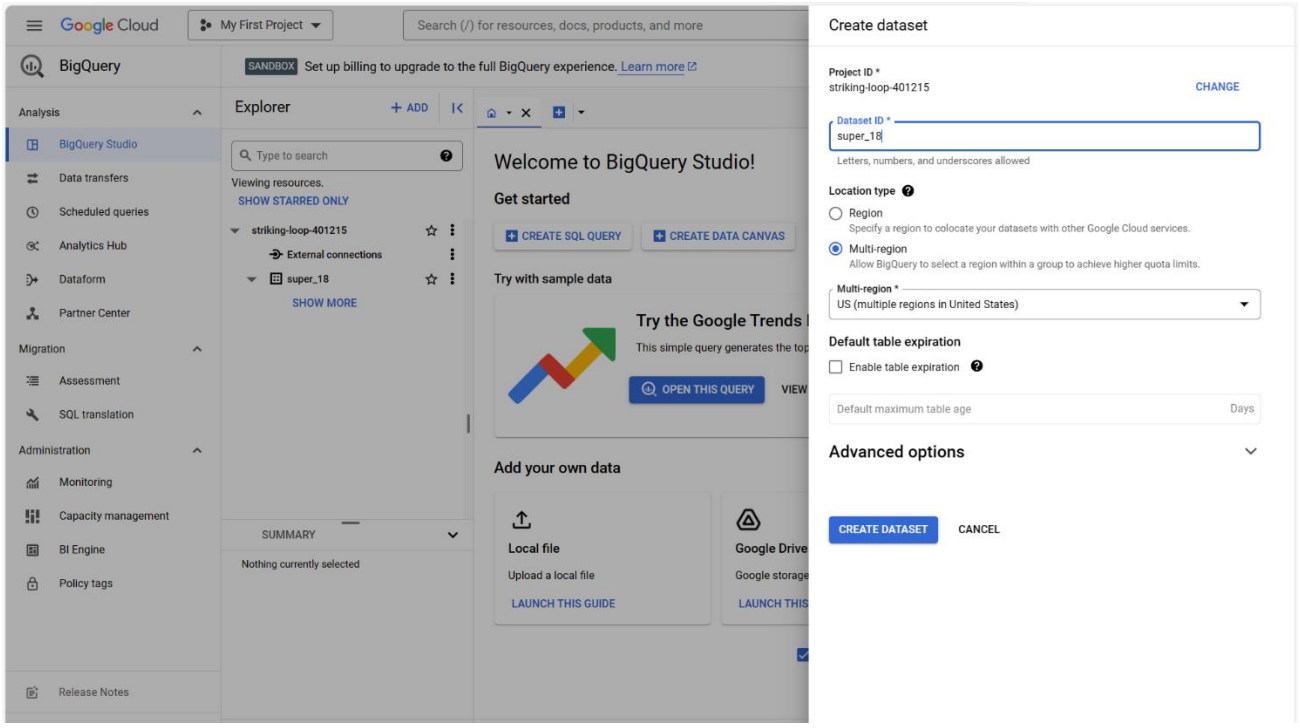
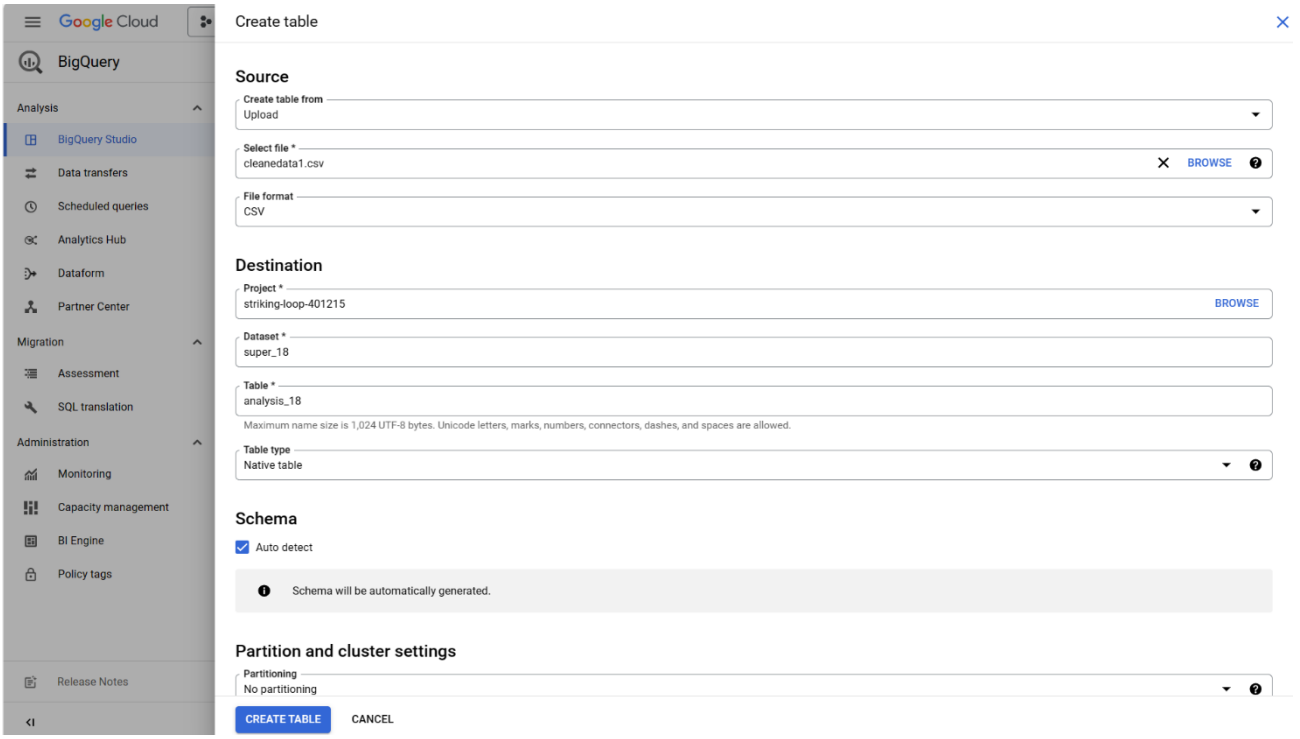
Project 5(Google Big Query)

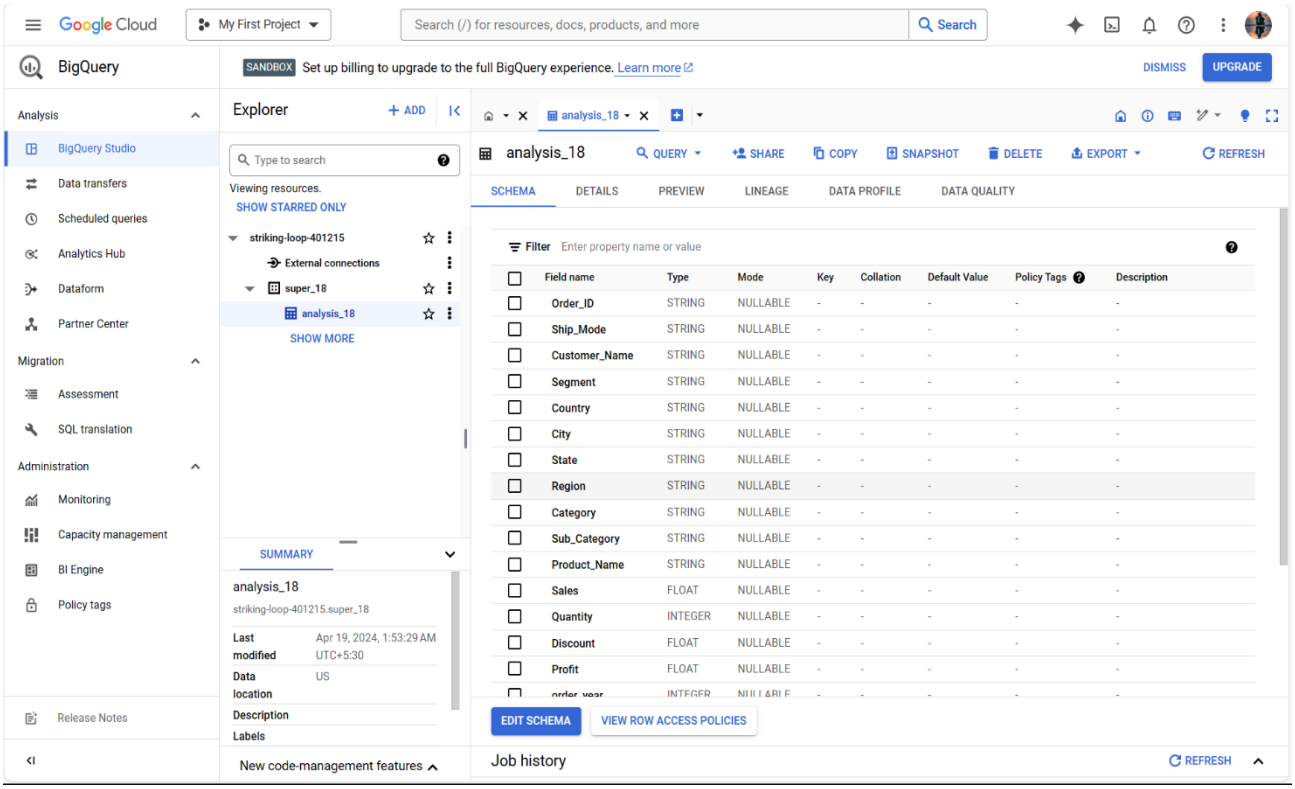
Creating DataSet



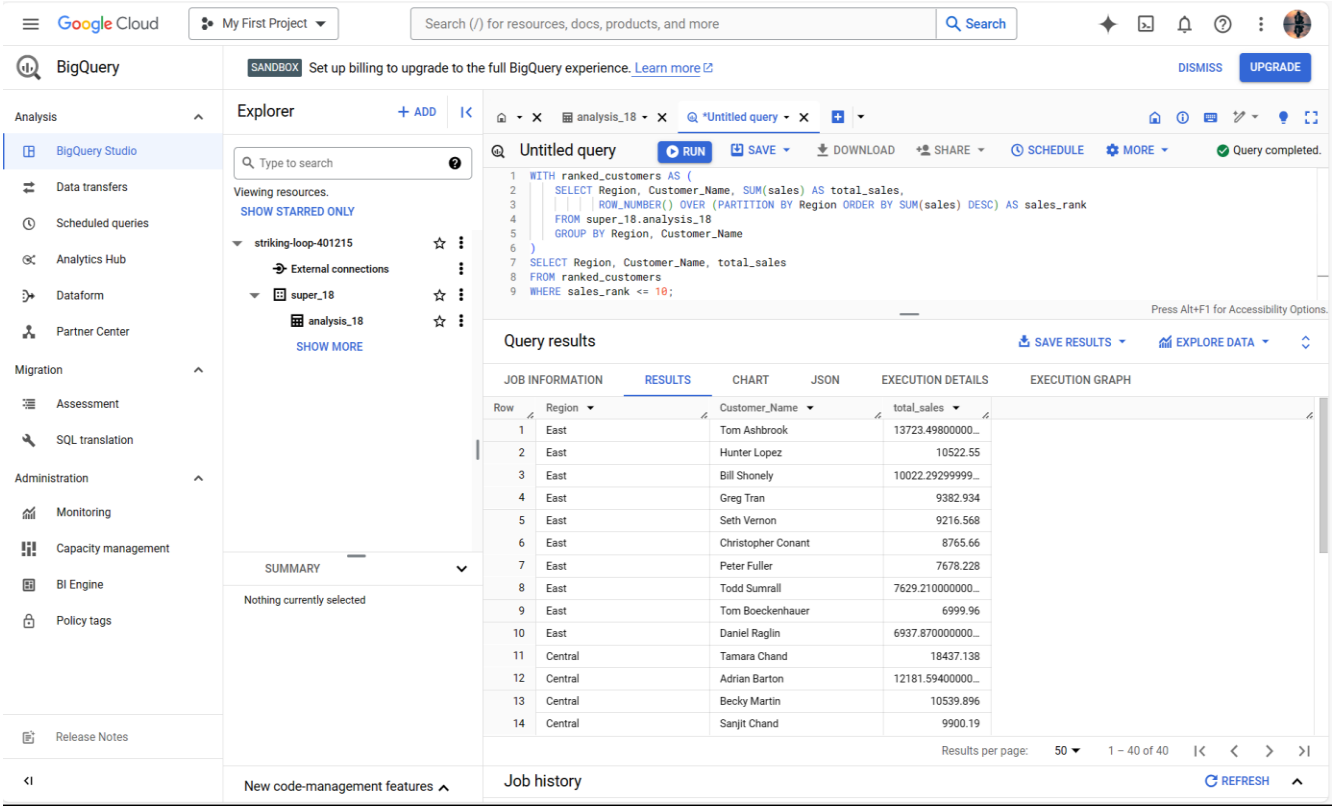
Uploading Data



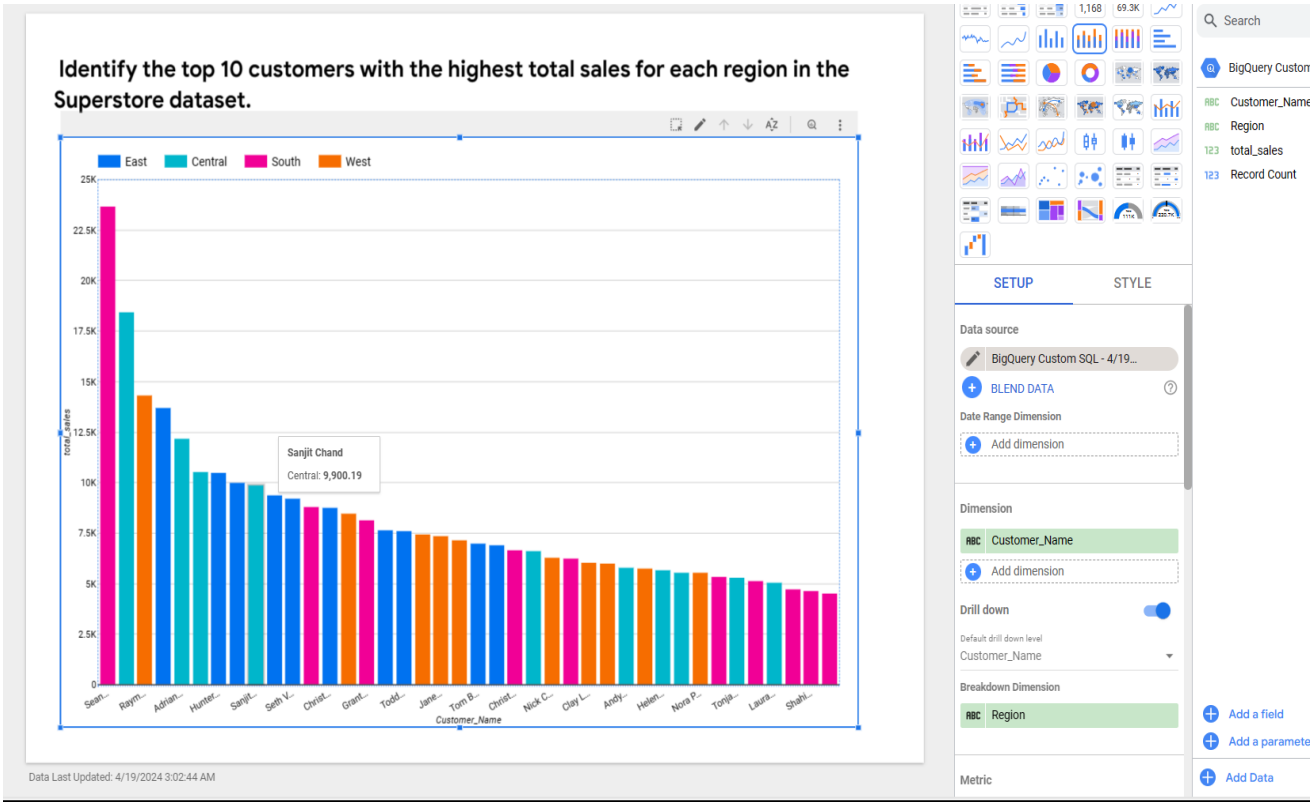
Schema of uploaded table



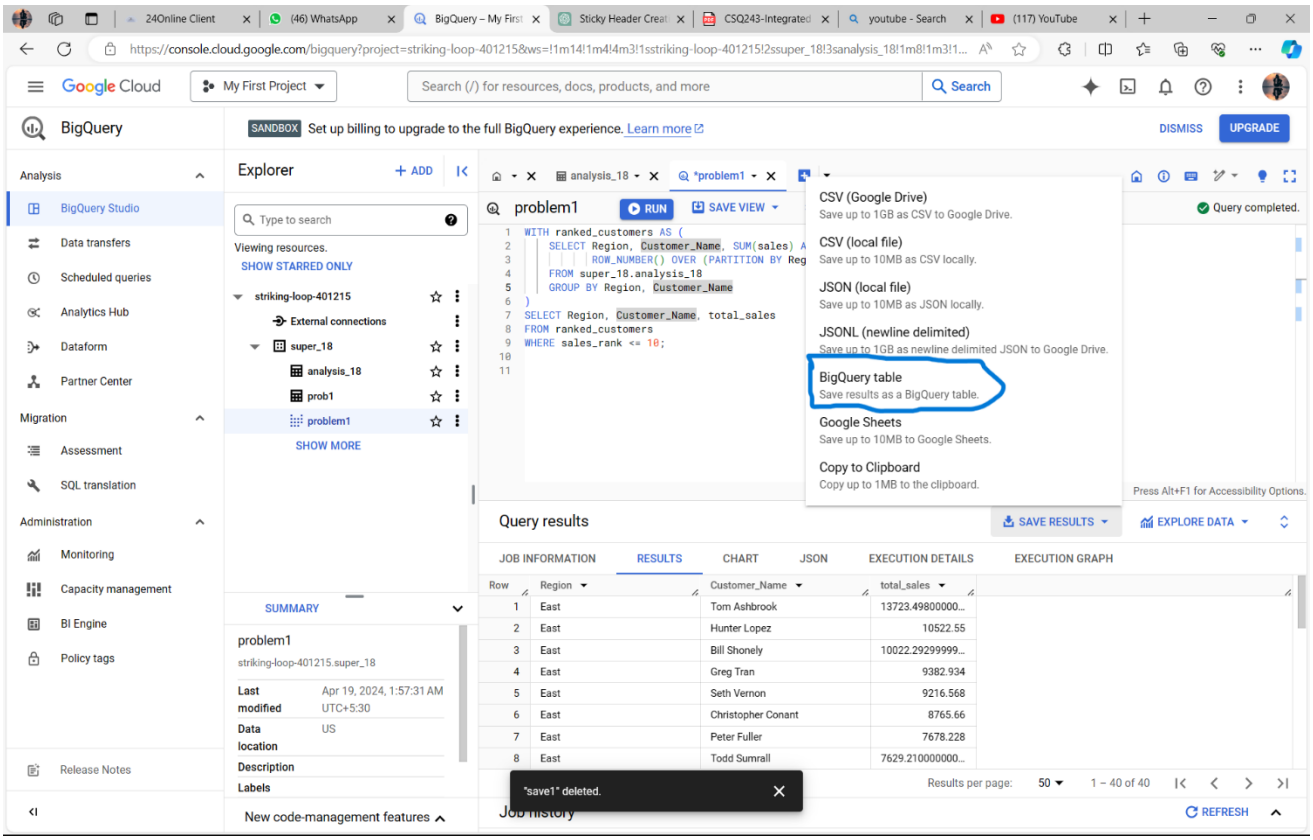
Identify the top 10 customers with the highest total sales for each region in the Superstore dataset.



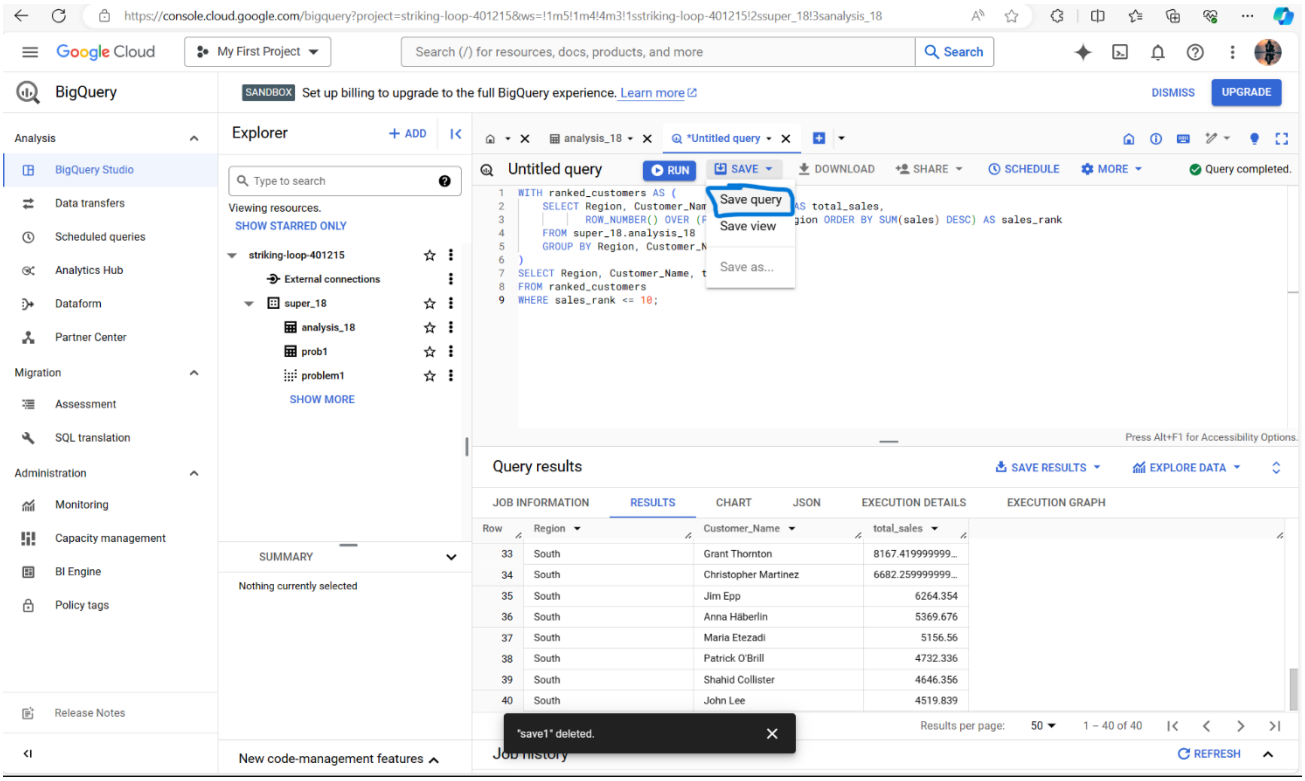
Visualisation:



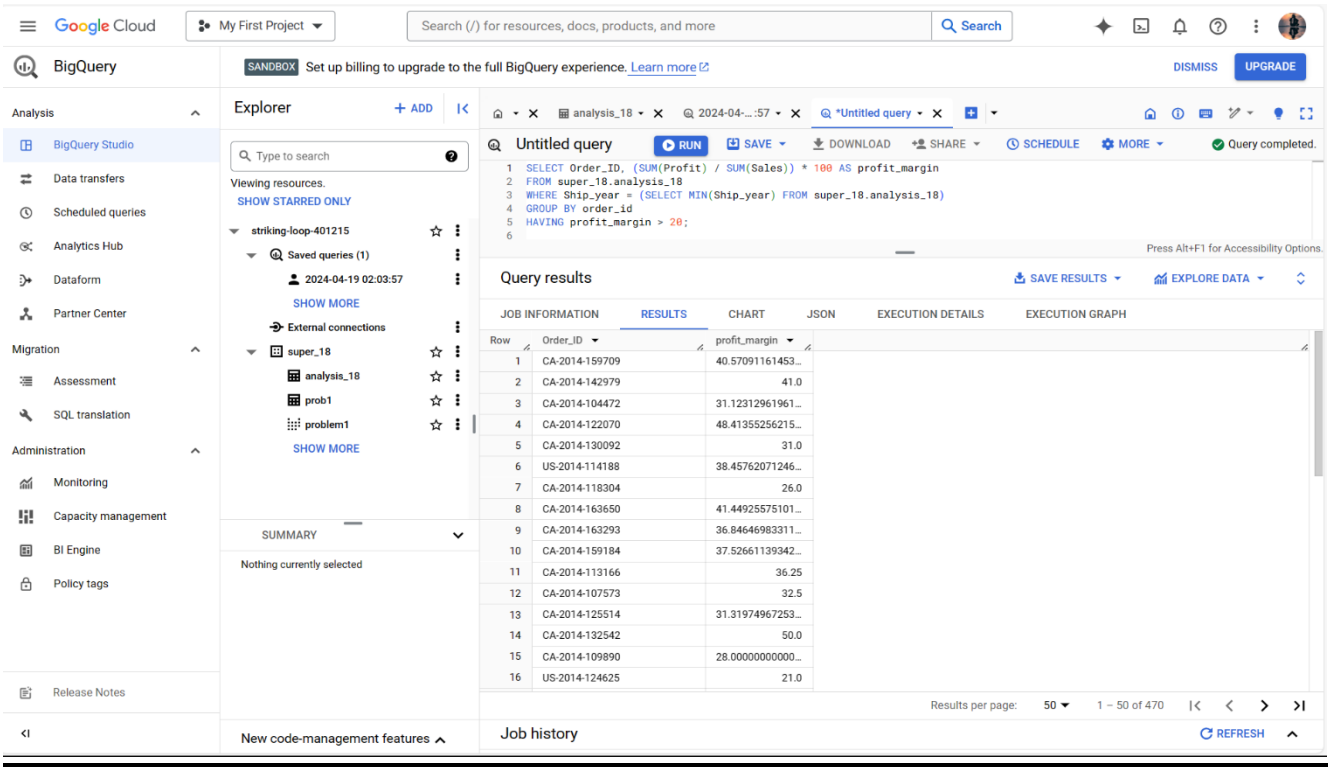
Saving Query view as table in big query



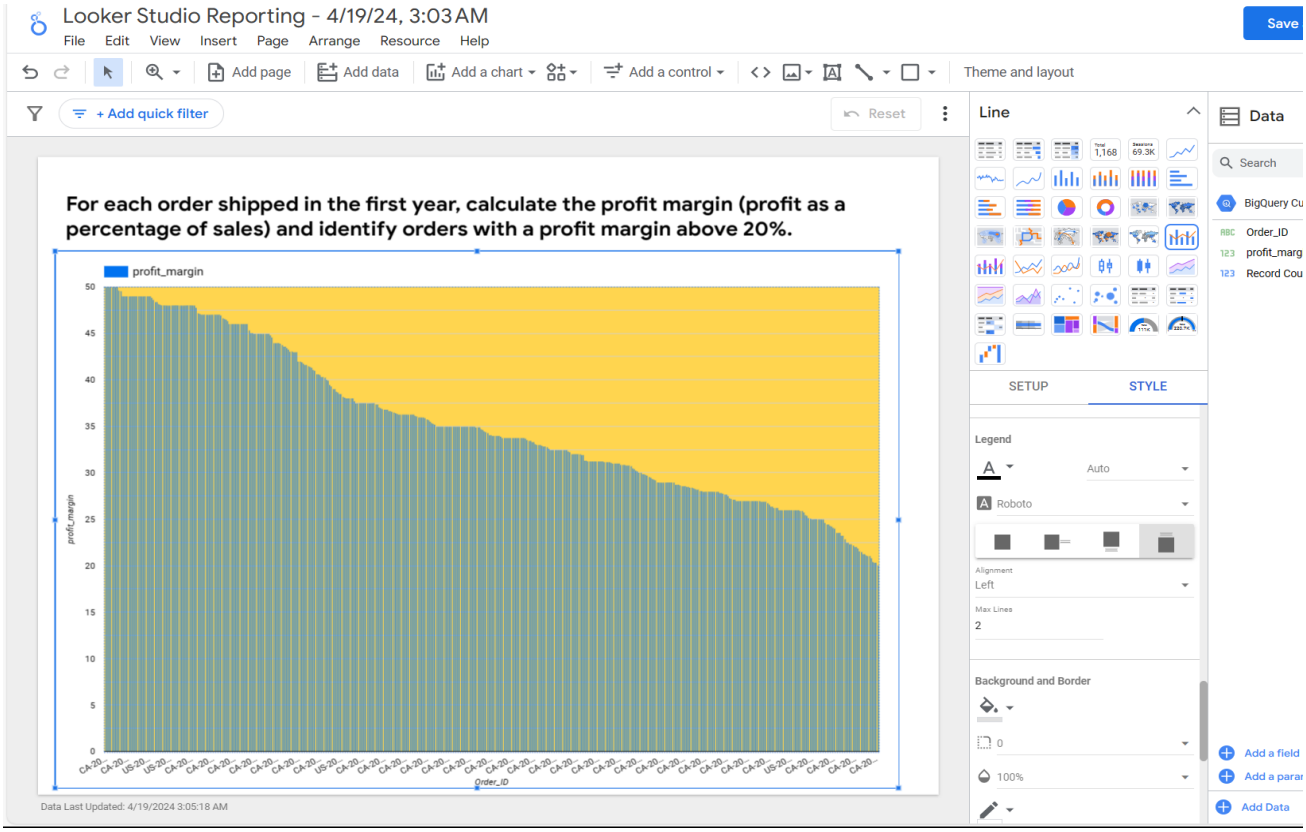
Saving Query



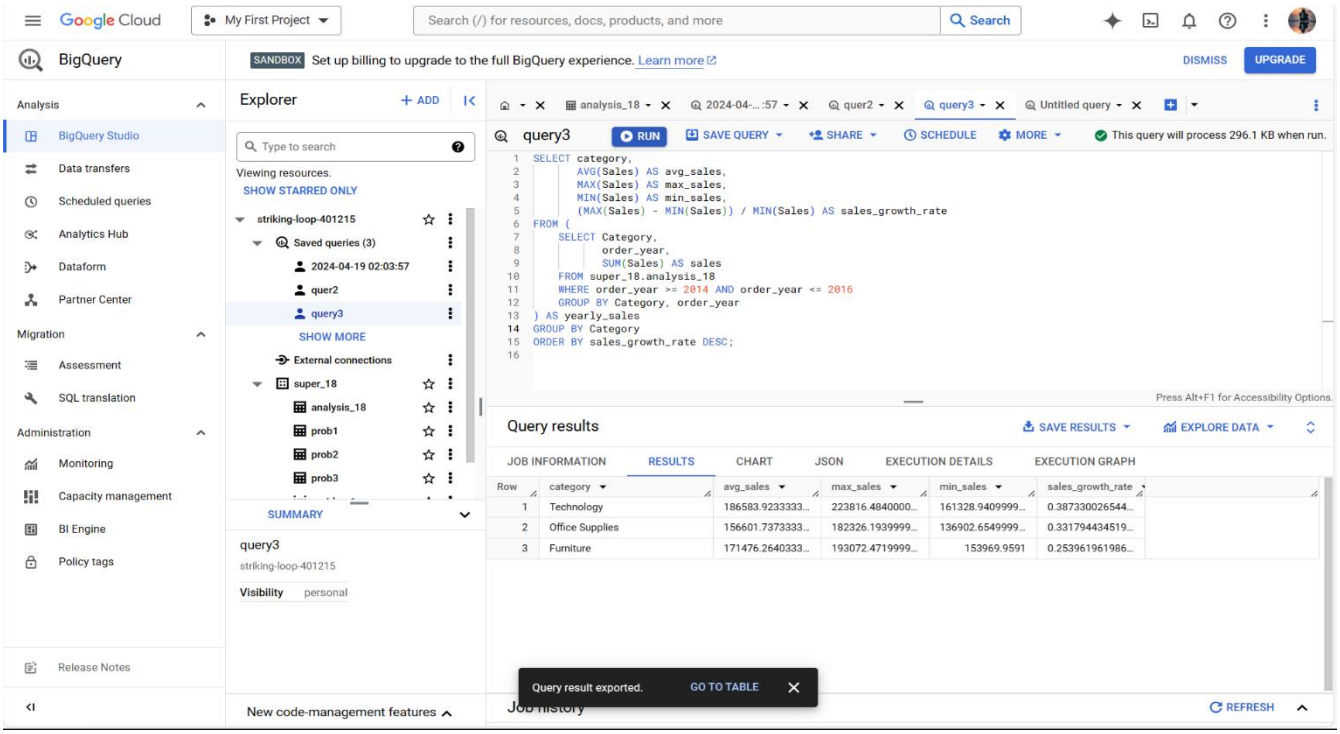
For each order shipped in the first year, calculate the profit margin (profit as a percentage of sales) and identify orders with a profit margin above 20%



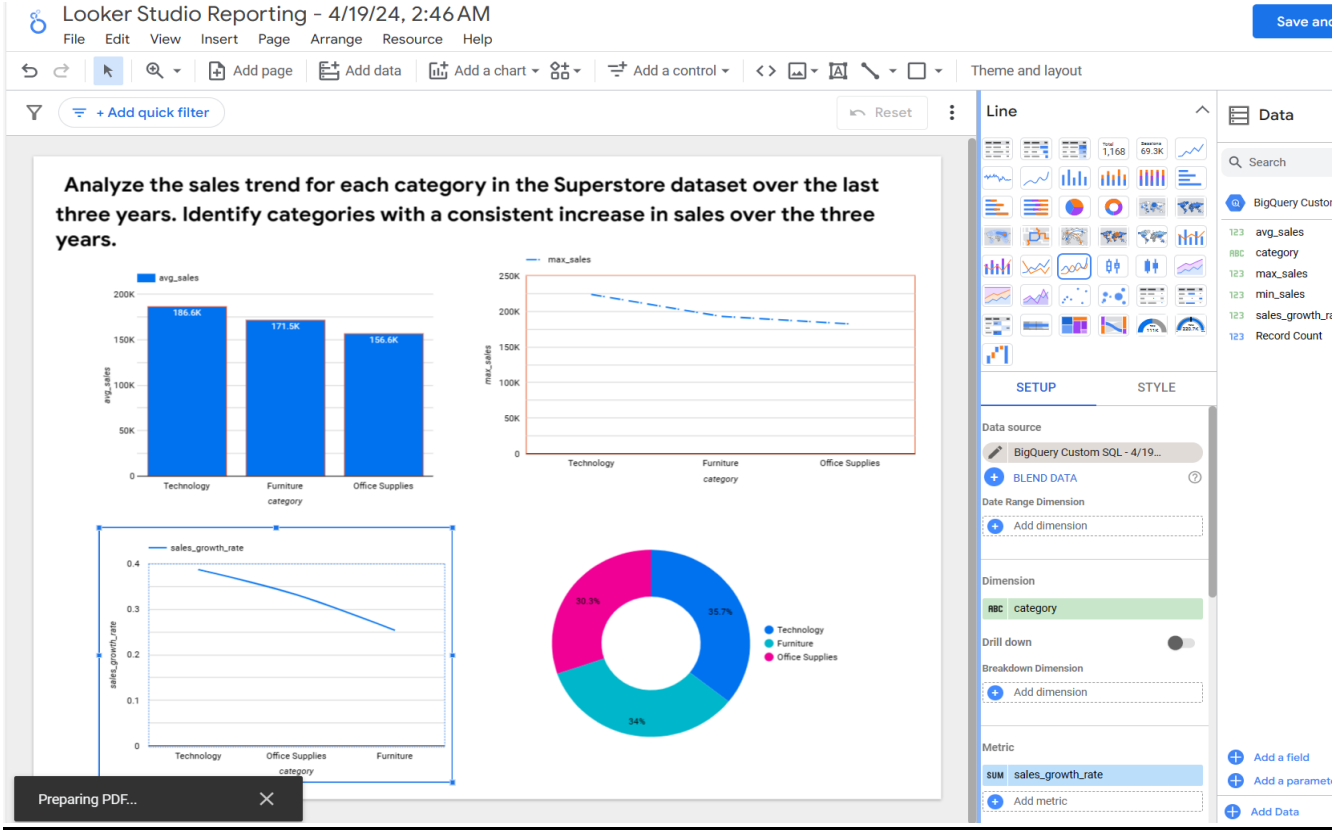
Visualisation:



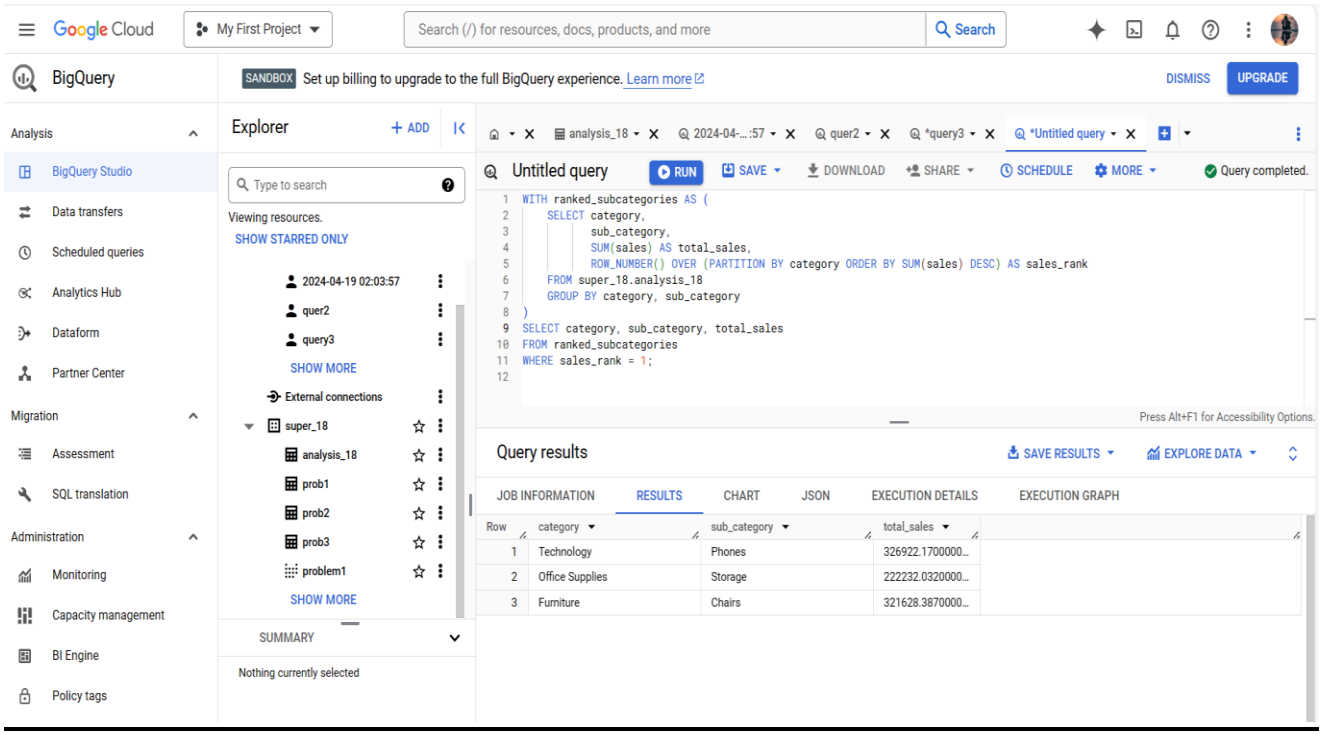
Analyze the sales trend for each category in the Superstore dataset over the last three years. Identify categories with a consistent increase in sales over the three years.



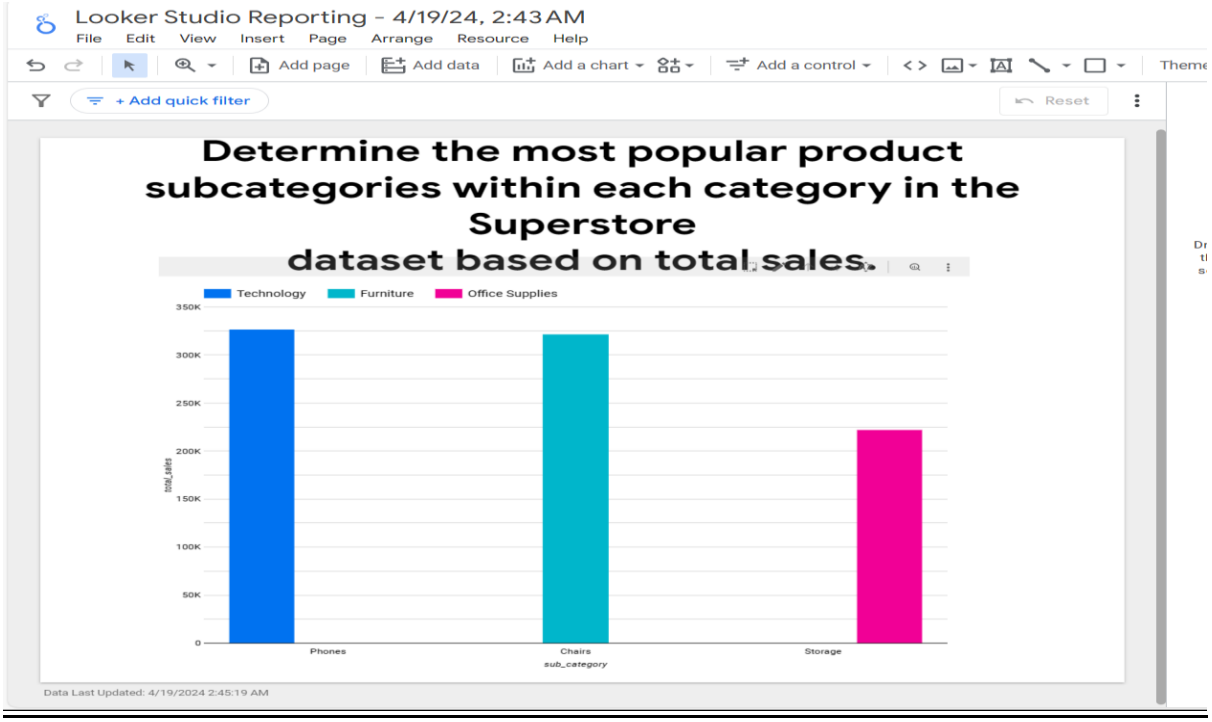
Visualisation:



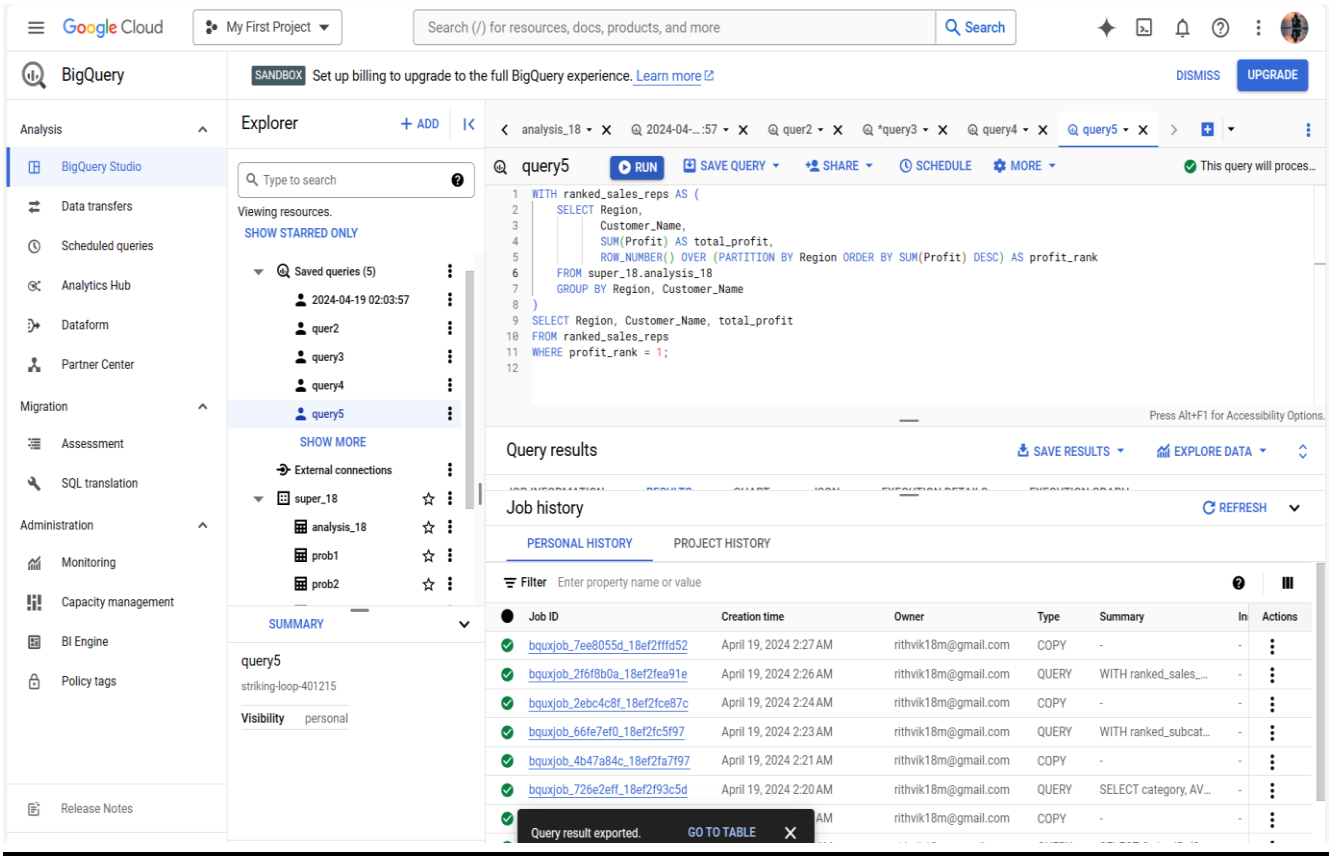
Determine the most popular product subcategories within each category in the Superstore dataset based on total sales



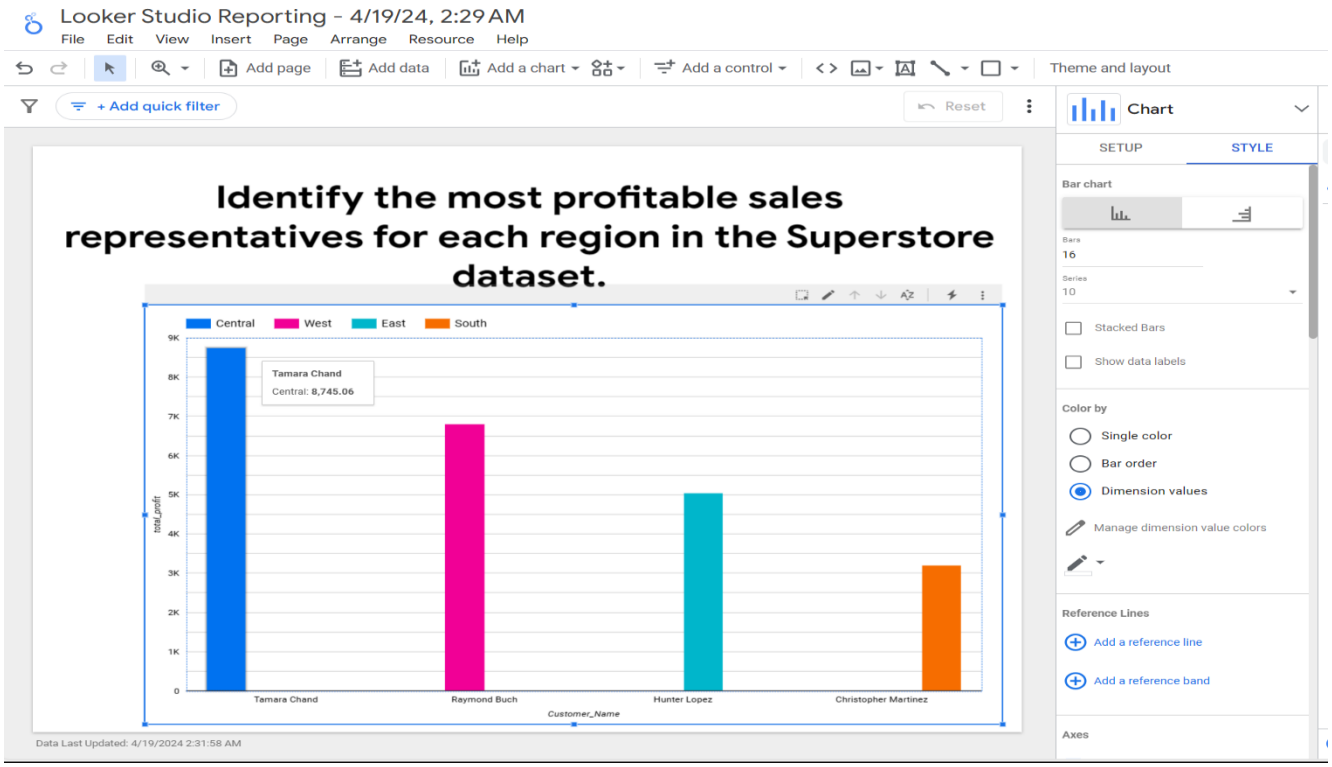
Visualisation:



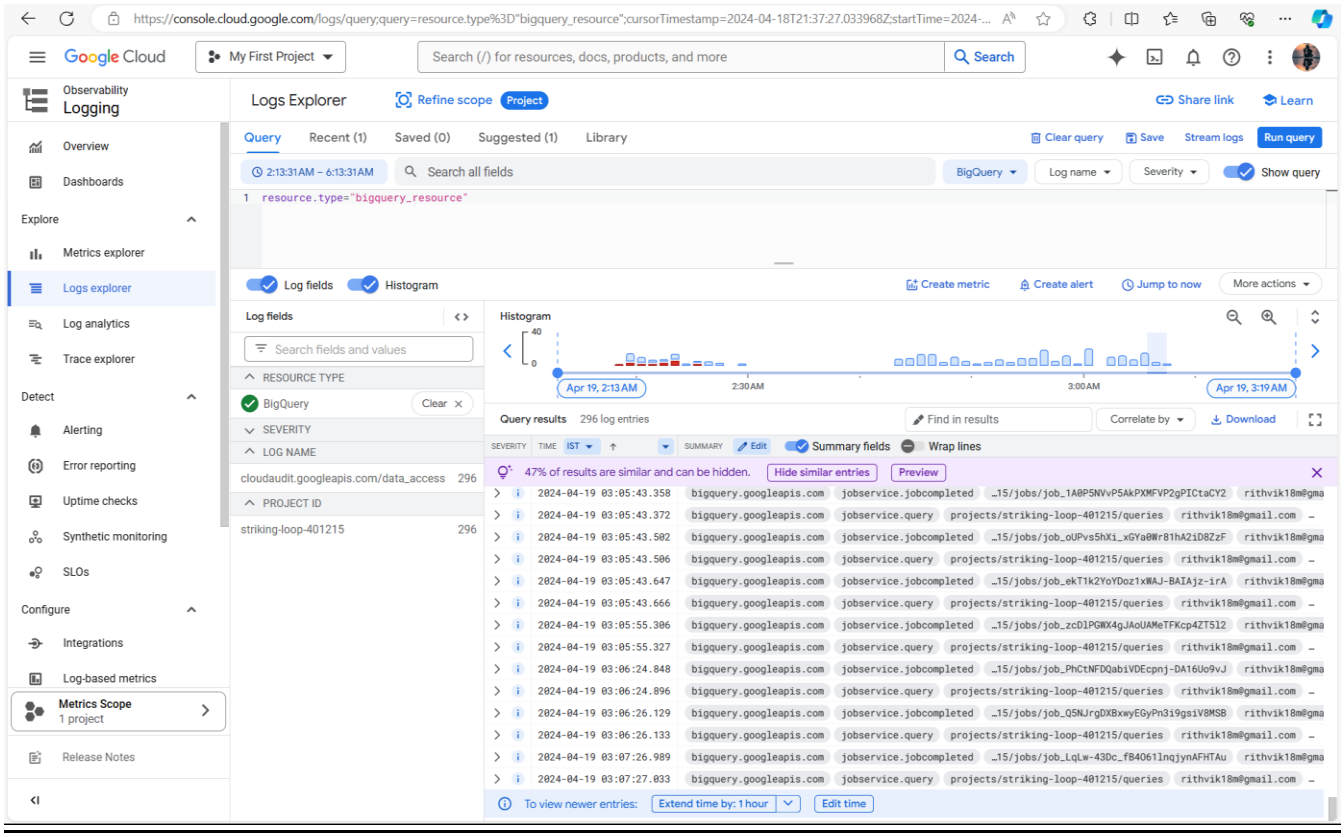
Identify the most profitable sales representatives for each region in the Superstore dataset

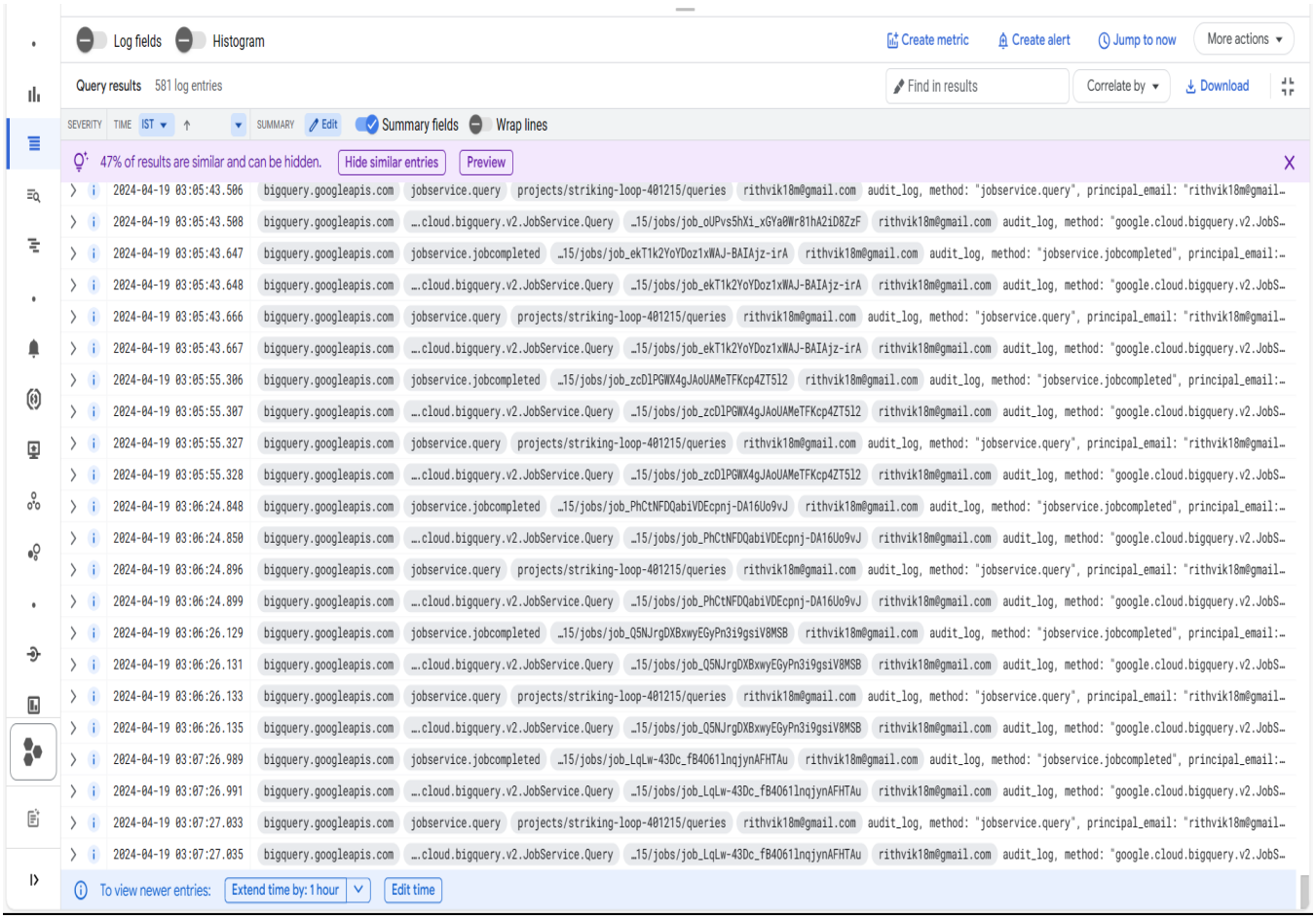


Visualisation:



Cloud Logs:





Analysis Documentation:

1. Top 10 Customers by Total Sales per Region

Query Result Explanation: After performing the query, we found that in the East region, Tom Ashbrook emerged as the top customer with total sales amounting to $13,723, while in the Central region, Tamara Chand led with total sales of $18,437. These insights shed light on the significant contributors to sales within each region, enabling targeted marketing or retention strategies to enhance customer relationships and drive revenue growth.

2. Profit Margin Analysis for First-Year Orders

Query Result Explanation: From the analysis, we identified approximately 470 out of 9800 orders that exhibited a profit margin above 20%. This suggests that a considerable portion of first-year orders achieved a healthy level of profitability, indicating effective cost management or pricing strategies. It also highlights areas where profitability might be optimized further through strategic adjustments in pricing or cost controls.

3. Sales Trend Analysis by Category Over Three Years

Query Result Explanation: Upon analyzing the sales trends over the last three years, it was observed that the Technology category exhibited the highest sales growth rate, with an average annual increase of 0.38. This indicates a significant upward trend in sales for technology-related products. Following closely behind, Office Supplies also demonstrated positive sales growth.

4. Popular Product Subcategories within Each Category

Query Result Explanation: In the Technology category, "Phones" emerged as the top-selling subcategory, indicating high consumer demand for communication devices. Similarly, within Office Supplies, the subcategory "Storage" recorded the highest total sales, suggesting a need for organizational solutions among consumers. These insights can inform inventory management decisions and marketing strategies to capitalize on popular product categories and subcategories.

5. Most Profitable Sales Representatives per Region

Query Result Explanation: Upon conducting the analysis, it was found that Tamara Chand emerged as the most profitable sales representative in the Central region. Tamara Chand achieved the highest total profit among all sales representatives operating in the Central region.

Identifying Tamara Chand as the most profitable sales representative in the Central region underscores her effectiveness in driving sales and profitability. This insight can be utilized to recognize and reward Tamara Chand's performance, as well as to study her sales strategies for potential replication or incorporation into training programs for other sales representatives.