## **ShopSmart\_Retail SQL Analysis**

### **Introduction**

The following analysis was conducted on the *ShopSmart\_Retail* database using SQL queries applied to three main tables: customer, products, and purchase\_history. The goal was to extract key business insights about customer demographics, product pricing, purchase patterns, revenue distribution, and brand performance.

The queries address various business questions, such as identifying new customers in 2021, analyzing gender distribution, determining high-demand products, evaluating city-based sales, and calculating revenue and quantities for different brands.

**Solution:**

You can improve all your introductions by making them concise yet insightful: clearly state the purpose of each query, link it to a real business need, and hint at how the results could be applied. For example, instead of simply saying “This query retrieves customers who signed up in 2021,” you could write, “This query identifies all customers who joined in 2021, providing essential contact details for targeted marketing and customer retention strategies.” In one or two sentences, mention *what* the query does, *why* it matters, and *how* it could be used. Keeping this structure consistent across all questions will make your report read like a professional business analysis rather than just a list of SQL outputs.

**Question and Answer:**

**Q: What are the first\_name, last\_name, and email of all customers who signed up in 2021?**

**Answer:** Alex Jones—[jessica.rodriguez32@mail.com](mailto:jessica.rodriguez32@mail.com);

Alex Smith—sarah.smith107@mail.com; Alex Garcia—linda.smith171@mail.com; Alex Jones—michael.davis256@mail.com; Alex Martinez—william.jones264@mail.com

**Q: How many customers are male, and how many are female?**

**Answer:** There are 538 female customers and 472 male customers.

Q: **List the product\_name and price\_per\_unit for all products in the 'Meat' category.**

**Answer:** For the 'Meat' category, the product and price per unit are:

* Chicken—2.7

**Q: Which products have a price\_per\_unit between $10 and $20 (inclusive)?  
Answer:** The products with a price\_per\_unit between $10 and $20 (inclusive) are:

* Mango—18.95
* Pasta — 17.94
* Orange — 10
* Bread — 14.25
* Strawberry - 15

**Q: Find the customer\_ids of all customers residing in 'Chicago' or 'Houston'?.**

**Answer:**

3 to 1007

**Q: What is the total quantity of 'Apple' products sold across all purchases?**

**Answer**: The total sold is 2317.

**Q: Calculate the total\_amount of all purchases made by customer\_id 1?**

**Answer:** 441.16

**Q: Which category of products has the highest average price\_per\_unit?**

**Answer: Dairy—24.518**

**Q: What is the total revenue generated by each brand?**

**Answer:** E—209,683.75, B—190,242.39, A—121,844.46, D—44,933.12, C—39,862.68

**Q: How many purchases were made in each city where customers reside?**

**Answer:**

* **Chicago**—1,697
* **Phoenix**—1,557
* **Houston**—1,548
* **New York** — 1,497
* **Philadelphia**—1,434
* **San Antonio**—1,292
* **Los Angeles**—1,283

**Q: For each purchase, what are the customer\_id, first\_name of the customer, and product\_name of the item purchased?**

**Answer:** 1004—Bella—No Purchase

1005—Latashia—No Purchase

1006—Herbert—No Purchase  
1007—Royal—No Purchase  
1008—Mac—No Purchase

**Q: Which city has the highest total total\_amount from all purchases made by its residents?**

**Answer:** Chicago**—101,867**

**Q: What is the average total\_amount per purchase for each gender?**

**Answer:** Female—59.11

Male—58.54

**Q: For each brand, what is the total quantity of products sold?**

**A:**

* **E** — 11,241
* **D** — 2,048
* **C** — 2,222
* **B**—9,034
* **A**—6,695