

The Store Sales project presents SQL querying skills using three data tables. Exploratory data analysis will be performed using diverse functions such as joining tables, grouping by certain criteria, and performing calculations.

The datasets were provided by the Google Data Analytics course taken in 2021 for exercise purposes. However, they were not used as training or example resources during the course.

The Store Sales project contains three tables: inventory, product, and sale.

Indexing was created because the database does not receive new writes and is static. This will allow faster search, especially when joining the three tables together and querying the sales table.

## ER Diagram

In order to create the SQL schema, the entities, attributes, and relationships need to be identified. The entities are the three tables: inventory, product, and sale. Each table contains attributes that identify the stores, products, or sale transactions. Based on the data, the following relationships can be identified:

- **Product to Sale: One-to-Many**

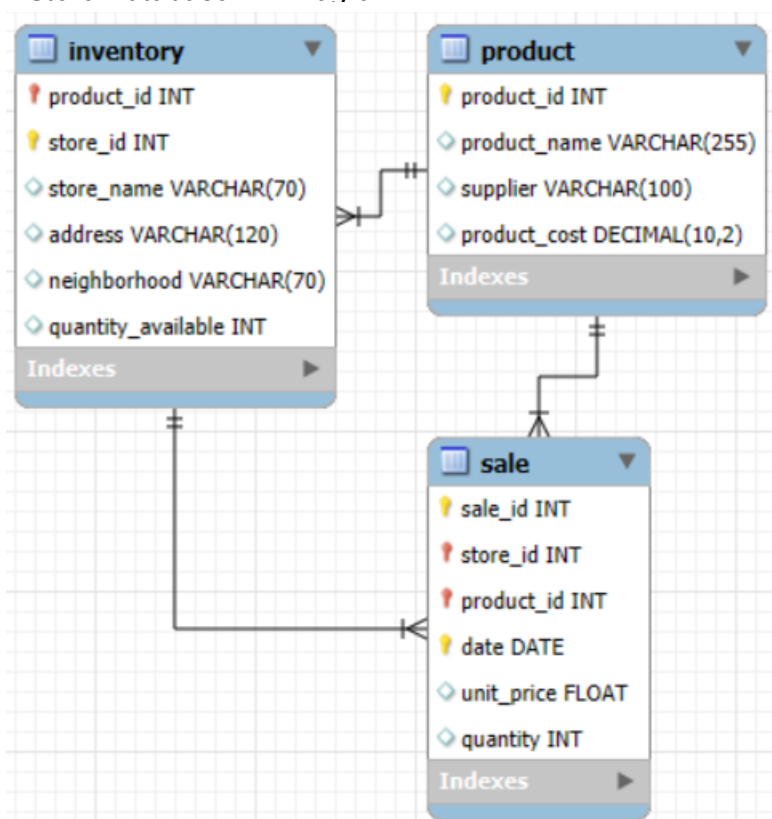
The `product_id` in the `product` table can appear multiple times in the `sale` table, as one product can be sold in multiple transactions.

- **Product to Inventory: One-to-Many**

One product can be available in multiple stores, therefore can appear multiple times in the `inventory` table.

- **Inventory to Sale: One-to-Many**

**Figure 1**  
Store Database ER Diagram



A store's id in the `inventory` table can be included multiple times in the `sale` table since a store will have many transactions.