**1. Customers Table**

* **Purpose:** The customers table stores information about the customers who interact with the business.
* **Columns:**
  + customer\_id (Primary Key): A unique identifier for each customer.
  + first\_name: The first name of the customer.
  + last\_name: The last name of the customer.
  + email: The email address of the customer (unique).
  + phone: The phone number of the customer.
  + date\_joined: The date the customer registered or joined the system.
* **Usage:** This table is essential for identifying and storing basic customer information. It is often used in conjunction with other tables, like orders and personal information, to track customer activity and engagement.

**2. Products Table**

* **Purpose:** The products table contains information about the products available for sale.
* **Columns:**
  + product\_id (Primary Key): A unique identifier for each product.
  + product\_name: The name of the product.
  + category: The category or type of the product (e.g., Electronics, Books, Clothing).
  + price: The price of the product.
  + stock: The quantity of the product available in inventory.
* **Usage:** This table is used to track the products sold by the business. It is often joined with the orders table to calculate sales and inventory management.

**3. Orders Table**

* **Purpose:** The orders table records the orders placed by customers for products.
* **Columns:**
  + order\_id (Primary Key): A unique identifier for each order.
  + customer\_id (Foreign Key): A reference to the customer who placed the order (linked to the customers table).
  + product\_id (Foreign Key): A reference to the product ordered (linked to the products table).
  + order\_date: The date the order was placed.
  + quantity: The quantity of the product ordered.
* **Usage:** This table tracks customer purchases and interactions with products. It is essential for calculating sales, order volume, and customer buying behavior. This table is often analyzed to understand purchasing patterns and order frequency.

**4. Personal Information Table**

* **Purpose:** The personal\_information table stores additional personal details about customers.
* **Columns:**
  + personal\_info\_id (Primary Key): A unique identifier for each entry in the table.
  + customer\_id (Foreign Key): A reference to the customer (linked to the customers table).
  + address: The customer's address, often including street, number, and additional information.
  + city: The city where the customer resides.
  + state: The state or province where the customer resides.
  + is\_working: A boolean (0/1) indicating whether the customer is employed.
* **Usage:** This table contains detailed customer information that might be necessary for logistics, marketing, and understanding the customer's lifestyle (e.g., whether they are employed). It helps provide a more complete profile of each customer.

**Relationships Between the Tables:**

* The **orders** table links **customers** to **products**, allowing the business to track customer purchasing behavior.
* The **personal\_information** table provides additional details about each customer from the **customers** table, which can be used for targeted marketing, delivery, or customer service.
* **Foreign Keys:**
  + The customer\_id column in the **orders** and **personal\_information** tables links to the customer\_id in the **customers** table.
  + The product\_id in the **orders** table references the **products** table.

These tables provide a comprehensive view of the customer lifecycle from registration to purchasing, helping businesses track, analyze, and improve customer relationships and sales.