Homework 1.1: Bank Database Design

Craft a database schema for a bank's operational system. This database should cover accounts, customers, and transactions.

Define Tables and Attributes:
Identify necessary tables for handling customers, accounts, and transactions.
Specify relevant attributes for each table (e.g., for customers, include name, customer ID, contact details; for accounts, consider account number, balance, customer ID; for transactions, detail transaction ID, account number, amount, date).

Outline Key Relationships:
Determine how these tables will interlink. What will be the primary keys? How should foreign keys be utilized to link customers to accounts and accounts to transactions?

Homework 1.2: Restaurant Management Database

Objective:
Establish a SQL database named `Restaurant` and create tables that represent a basic restaurant management system. After creating the tables, insert sample data into each table.

Database and Schema Details:

1. **Database:**
    - Name the database `Restaurant`.
2. **Tables and Attributes:**
    - **Table: `Menu`**
        - `menu_id` (INT, primary key, auto-increment)
        - `item_name` (VARCHAR(50))
        - `price` (INT)
    - **Table: `Customers`**
        - `customer_id` (INT, primary key, auto-increment)
        - `first_name` (VARCHAR(50))
        - `last_name` (VARCHAR(50))
        - `contact_number` (VARCHAR(15))
    - **Table: `Tables`**
        - `table_id` (INT, primary key, auto-increment)
        - `capacity` (INT)
    - **Table: `Orders`**
        - `order_id` (INT, primary key, auto-increment)
        - `customer_id` (INT, foreign key to `Customers`)
        - `table_id` (INT, foreign key to `Tables`)
        - `order_time` (TIMESTAMP)