

# **SQL Case Study**

# Domain:

Supply chain management.

### Context:

"Richard's Supply" is a company which deals with different food products. The company is associated with a pool of suppliers. Every Supplier supplies different types of food products to Richard's supply. This company also receives orders for the food products from various customers. Each order may have multiple products mentioned along with the quantity. The company has been maintaining the database for 2 years.

## Refer to the following Entity-Relationship diagram of the database.

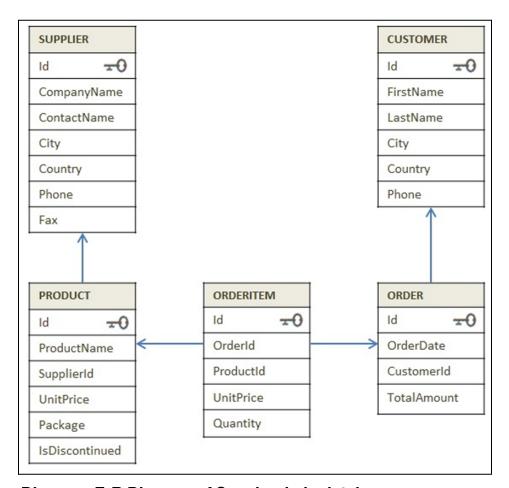


Diagram: E-R Diagram of Supply\_chain database



**Instruction:** Execute the SQL files in the sequence given below.

- 1. 1\_DDL\_Case Study
- 2. 2 Data
- 3. 3 Data Constraints

#### PART A: Explore the data

- 1. Read the data from all tables.
- 2. Find the country wise count of customers.
- 3. Display the products which are not discontinued.
- 4. Display the list of companies along with the product name that they are supplying.
- 5. Display customer's information who stays in 'Mexico'
- 6. Display the price of the costliest item that is ordered by the customer along with the customer details.
- 7. Display supplier id who owns the highest number of products.
- 8. Display month wise and year wise count of the orders placed.
- 9. Which country has maximum suppliers.
- 10. Which customers did not place any order.

#### **PART B: Know the Business**

- 1. Arrange the product id, product name based on high demand by the customer.
- 2. Display the number of orders delivered every year.
- 3. Calculate year-wise total revenue.
- 4. Display the customer details whose order amount is maximum including his past orders.
- 5. Display total amount ordered by each customer from high to low.

The sales and marketing department of this company wants to find out how frequently customers have business with them. This can be done in two ways. (Answer Q 6 and Q 7 for the same) \*/

- Approach 1. List the current and previous order amount for each customer.
- 7. Approach 2. Display the customerid, order ids and the order dates along with the previous order date and the next order date for every customer in the table::
- 8. Find out the top 3 suppliers in terms of revenue generated by their products.