**WHAT IS DATABASE IN SQL?**

SQL database is a dataset that uses SQL language. It consists of tables with rows and columns containing data and a unique primary key. Such databases can establish links — or relationships — between the data by joining tables. That's why they are also referred to as relational databases.

**1.TABLES: -**

The database contains 4 tables customers, orders, products and order\_item

**2. COLUMNS: -**

For each table, list the columns with their data types, descriptions, constraints and if they are primary or foreign keys.

**Table 1: - Customers**

Columns Data type Description

Customer\_id integer unique customer identifier

Customer\_name varchar (100) Name of customers

Email varchar (100) email of customers

Phone\_number integer Number of customers

PRIMARY KEY = customer\_id

**Table 2: - Orders**

Columns Data type Description

Order\_id varchar (15) unique order\_id identifier

Customer\_name varchar (50) Name of customers

Product varchar (50) Name of product

Quantity integer count of products

Price decimal (10,5) price of product

Order\_date Date date of the order product

Customer\_id integer Reference

PRIMARY KEY = order\_id

FOREIGN KEY = customer\_id

**Table 3: - Products**

Columns Data type Description

Product\_id varchar (15) unique product identifier

Product\_name varchar (50) name of the product

Category varchar (50) category of the product

Price decimal (10,5) price of the product

Stock\_quantity integer products available

Rating decimal (10,5) rating of the product

Order\_id varchar (15) Reference

PRIMARY KEY = Product\_id

FOREIGN KEY = order\_id

**Table 4: - order\_item**

Columns Data type Description

Order\_id Integer unique order id

Product\_id varchar (15) unique product identifier

Quantity integer count of products

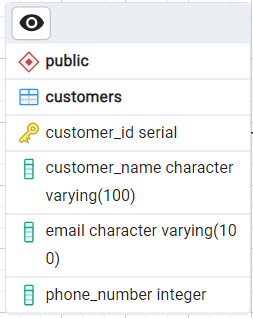
Price\_per\_unit decimal (10,5) price of the product

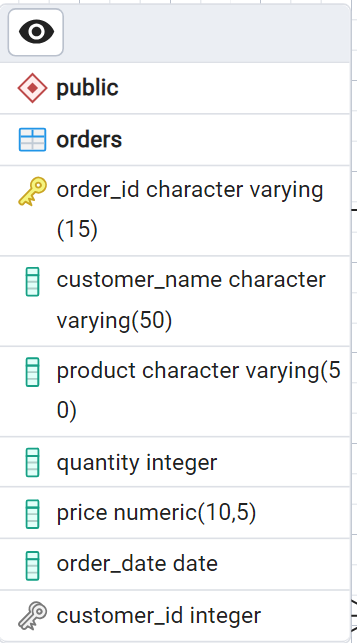
Total\_price decimal (10,5) total price of product

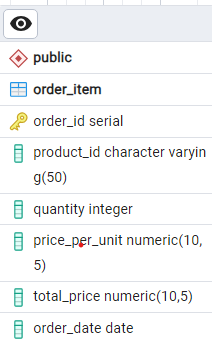
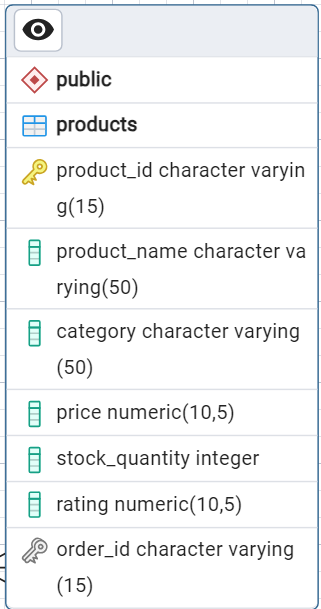
Order\_date Date date of the order product

**DATA BASE RELATIONSHIP**

1. Customer to orders relationship
2. Orders to product relationship
3. Products to order\_item relationship

**ER DIAGRAM**





**Database query: Full join**

select c.customer\_name,c.email,c.phone\_number,o.order\_id,o.product,o.quantity,o.price,o.order\_date,p.product\_id,p.product\_name,

p.category,p.price,p.stock\_quantity,p.rating,a.order\_id, a.price\_per\_unit,a.total\_price,a.order\_date

from customers as c

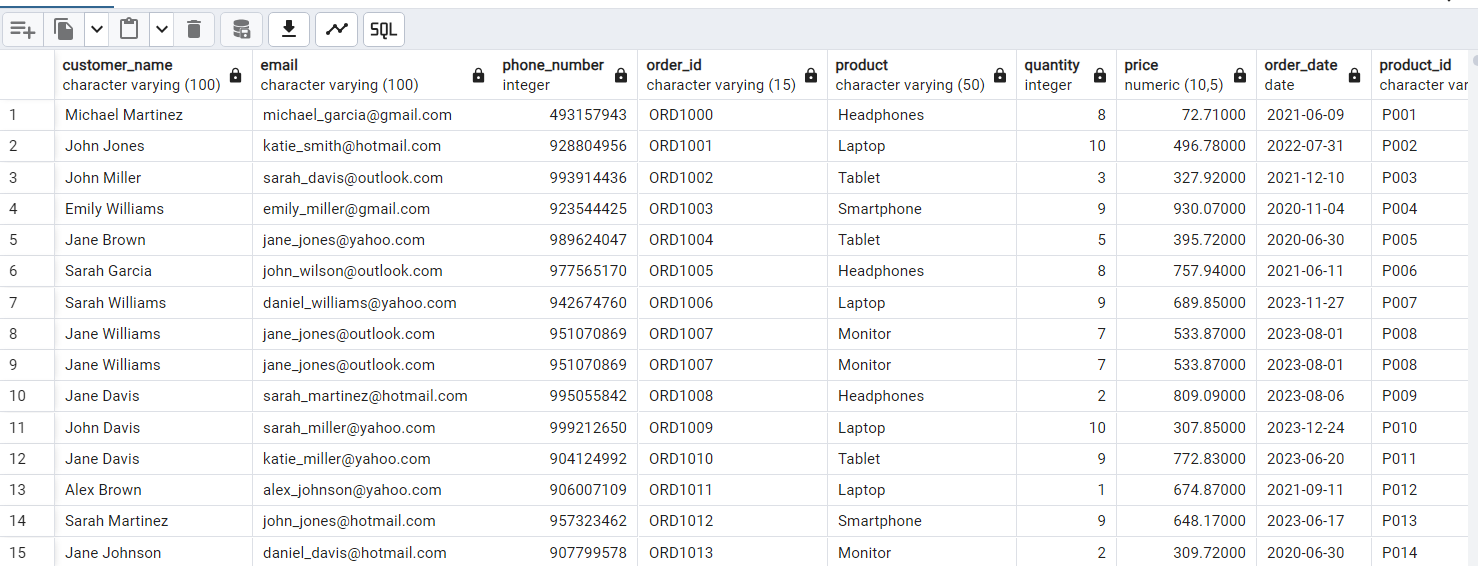
full join orders as o

on c.customer\_id = o.customer\_id

full join products as p

on o.order\_id=p.order\_id

full join order\_item as a

on p.product\_id=a.product\_id