🡪Created schema phone

🡪**created tables customers, vendors, products, sales**

* CREATE TABLE Customers (

customer\_id INT PRIMARY KEY AUTO\_INCREMENT,

customer\_name VARCHAR(100) NOT NULL,

email VARCHAR(100),

phone\_number VARCHAR(15),

address VARCHAR(255) );

🡪 CREATE TABLE Vendors (

vendor\_id INT PRIMARY KEY AUTO\_INCREMENT,

vendor\_name VARCHAR(100) NOT NULL,

contact\_name VARCHAR(100),

contact\_email VARCHAR(100),

contact\_phone VARCHAR(15),

address VARCHAR(255));

🡪 CREATE TABLE Products (

product\_id INT PRIMARY KEY AUTO\_INCREMENT,

product\_name VARCHAR(100) NOT NULL,

category VARCHAR(50),

price DECIMAL(10, 2),

stock\_quantity INT);

🡪 CREATE TABLE Sales (

sale\_id INT PRIMARY KEY AUTO\_INCREMENT,

product\_id INT,

customer\_id INT,

vendor\_id INT,

quantity INT,

sale\_amount DECIMAL(10, 2), -- Original sales amount

tax DECIMAL(10, 2) DEFAULT 0.00, -- Tax amount

freight DECIMAL(10, 2) DEFAULT 0.00, -- Freight amount

net\_sales DECIMAL(10, 2), -- Calculated net sales(sale\_amount+tax+flight)

sale\_date DATE,

FOREIGN KEY (product\_id) REFERENCES Products(product\_id),

FOREIGN KEY (customer\_id) REFERENCES Customers(customer\_id),

FOREIGN KEY (vendor\_id) REFERENCES Vendors(vendor\_id));

Created trigger for net\_sales column in sales table

DELIMITER //

CREATE TRIGGER before\_sales\_insert

BEFORE INSERT ON Sales

FOR EACH ROW

BEGIN

SET NEW.net\_sales = NEW.sale\_amount + NEW.tax + NEW.freight;

END;

//

**Insert 100 rows data into customers**

INSERT INTO Customers (customer\_name, email, phone\_number, address)

VALUES ('John Doe', 'john@example.com', '123-456-7890','cooppel');

INSERT INTO Customers (customer\_name, email, phone\_number, address)

VALUES ('Jane Smith', 'jane@example.com', '123-456-7891','grapevine');

INSERT INTO Customers (customer\_name, email, phone\_number, address)

VALUES ('Alice Johnson', 'alice@example.com', '123-456-7892','flower mound');

INSERT INTO Customers (customer\_name, email, phone\_number, address)

VALUES ('Bob Brown', 'bob@example.com', '123-456-7893', 'denton');

INSERT INTO Customers (customer\_name, email, phone\_number, address)

VALUES ('Carol White', 'carol@example.com', '123-456-7894','allen');

Insert 100 rows data into vendors

select \* from vendors;

INSERT INTO Vendors (vendor\_name, contact\_name, contact\_email, contact\_phone, address)

VALUES ('Costco', 'Mike Davis','costco@gmail.com', '321-654-0987', 'Dallas');

INSERT INTO Vendors (vendor\_name, contact\_name, contact\_email, contact\_phone, address)

VALUES ('Walmart', 'Sara Miller','walmart@gmail.com', '321-654-0988', 'Austin');

INSERT INTO Vendors (vendor\_name, contact\_name, contact\_email, contact\_phone, address)

VALUES ('Sams', 'Tom Harris', 'sams@gmail.com','321-654-0989', 'Houston');

INSERT INTO Vendors (vendor\_name, contact\_name, contact\_email, contact\_phone, address)

VALUES ('Target', 'Nancy Wilson', 'target@gmail.com','321-654-0990', 'Detriot');

INSERT INTO Vendors (vendor\_name, contact\_name, contact\_email, contact\_phone, address)

VALUES ('BestBuy', 'Chris Martin','target@gmail.com', '321-654-0991', 'New York');

Insert 100 rows data into products

INSERT INTO Products (product\_name, price, stock\_quantity, tax)

VALUES ('samsung', 799.99, '100','10');

INSERT INTO Products (product\_name, price, stock\_quantity, tax)

VALUES ('iphone', 799.99, '100','10');

INSERT INTO Products (product\_name, price, stock\_quantity, tax)

VALUES ('motorola', 799.99, '100','10');

INSERT INTO Products (product\_name, price, stock\_quantity, tax)

VALUES ('lg', 799.99, '100','10');

INSERT INTO Products (product\_name, price, stock\_quantity, tax)

VALUES ('oneplus', 799.99, '100','10');

Insert data into sales

INSERT INTO Sales (product\_id, customer\_id, vendor\_id, quantity, sale\_amount, tax, freight, sale\_date)

VALUES (1, 1, 1, 2, 1599.98, 100.00, 50.00, '2024-07-01');

INSERT INTO Sales (product\_id, customer\_id, vendor\_id, quantity, sale\_amount, tax, freight, sale\_date)

VALUES (2, 2, 2, 1, 499.99, 50.00, 20.00, '2024-07-01');

INSERT INTO Sales (product\_id, customer\_id, vendor\_id, quantity, sale\_amount, tax, freight, sale\_date)

VALUES (3, 3, 3, 3, 2999.97, 30.00, 10.00, '2024-07-01');

INSERT INTO Sales (product\_id, customer\_id, vendor\_id, quantity, sale\_amount, tax, freight, sale\_date)

VALUES (4, 4, 4, 4, 799.96, 80.00, 30.00, '2024-07-02');

INSERT INTO Sales (product\_id, customer\_id, vendor\_id, quantity, sale\_amount, tax, freight, sale\_date)

VALUES (5, 5, 5, 5, 1249.95, 90.00, 40.00, '2024-07-02');

**Write Query to Get Sales by Product and Vendor with Calculated net\_sales**

SELECT

p.product\_name,

v.vendor\_name,

SUM(s.quantity) AS total\_quantity\_sold,

SUM(s.sale\_amount) AS total\_sales\_amount,

SUM(s.net\_sales) AS total\_net\_sales

FROM

Sales s

JOIN

Products p ON s.product\_id = p.product\_id

JOIN

Vendors v ON s.vendor\_id = v.vendor\_id

GROUP BY

p.product\_name,

v.vendor\_name

ORDER BY

p.product\_name,

v.vendor\_name;

**Total sales made by each vendor for each product**

**Query:**

SELECT

v.vendor\_name AS vendor\_name,

p.product\_name AS product\_name,

SUM(s.net\_sales) AS total\_sales

FROM

Sales s

JOIN

Vendors v ON s.vendor\_id = v.vendor\_id

JOIN

Products p ON s.product\_id = p.product\_id

GROUP BY

v.vendor\_name, p.product\_name

ORDER BY

total\_sales DESC;

**output:**

A screenshot of a phone number

Description automatically generated

**How much of the sales have been made by different vendors on products and who are all the top customers.**

**Query**:

SELECT

c.customer\_name AS customer\_name,

SUM(s.net\_sales) AS total\_spent

FROM

Sales s

JOIN

Customers c ON s.customer\_id = c.customer\_id

GROUP BY

c.customer\_name

ORDER BY

total\_spent DESC

LIMIT 5;

**Output:**

**A screenshot of a computer

Description automatically generated**