CREATE TABLE customers (

customer\_id INT NOT NULL AUTO\_INCREMENT,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

email VARCHAR(100) NOT NULL,

phone VARCHAR(20),

address VARCHAR(200),

city VARCHAR(50),

state VARCHAR(50),

zip VARCHAR(20),

PRIMARY KEY (customer\_id)

);

CREATE TABLE products (

product\_id INT NOT NULL AUTO\_INCREMENT,

name VARCHAR(100) NOT NULL,

description TEXT,

category VARCHAR(50),

price DECIMAL(10, 2) NOT NULL,

PRIMARY KEY (product\_id)

);

CREATE TABLE orders (

order\_id INT NOT NULL AUTO\_INCREMENT,

customer\_id INT NOT NULL,

order\_date DATETIME NOT NULL,

status ENUM('Pending', 'Shipped', 'Delivered') NOT NULL,

PRIMARY KEY (order\_id),

FOREIGN KEY (customer\_id) REFERENCES customers(customer\_id)

);

CREATE TABLE order\_items (

order\_item\_id INT NOT NULL AUTO\_INCREMENT,

order\_id INT NOT NULL,

product\_id INT NOT NULL,

quantity INT NOT NULL,

price DECIMAL(10, 2) NOT NULL,

PRIMARY KEY (order\_item\_id),

FOREIGN KEY (order\_id) REFERENCES orders(order\_id),

FOREIGN KEY (product\_id) REFERENCES products(product\_id)

);

INSERT INTO customers (first\_name, last\_name, email, phone, address, city, state, zip) VALUES

('John', 'Doe', 'johndoe@email.com', '123-456-7890', '123 Main St', 'Anytown', 'CA', '12345'),

('Jane', 'Smith', 'janesmith@email.com', '555-555-1212', '456 Oak St', 'Smalltown', 'CA', '67890'),

('Bob', 'Johnson', 'bobjohnson@email.com', '987-654-3210', '789 Maple St', 'Bigtown', 'CA', '45678');

INSERT INTO products (name, description, category, price) VALUES

('T-Shirt', 'Plain cotton t-shirt', 'Clothing', 19.99),

('Hoodie', 'Hooded sweatshirt', 'Clothing', 39.99),

('Sneakers', 'Low-top canvas sneakers', 'Shoes', 59.99),

('Watch', 'Analog wristwatch', 'Accessories', 99.99),

('Backpack', 'Canvas backpack', 'Accessories', 49.99);

INSERT INTO orders (customer\_id, order\_date, status) VALUES

(1, '2022-01-01 10:00:00', 'Pending'),

(2, '2022-01-02 11:00:00', 'Shipped'),

(3, '2022-01-03 12:00:00', 'Delivered'),

(2,'2022-01-04 09:00:00', 'Shipped'),

(1, '2022-02-01 10:00:00', 'Pending'),

(2, '2022-03-01 11:00:00', 'Shipped'),

(3, '2022-04-01 12:00:00', 'Delivered');

INSERT INTO order\_items (order\_id, product\_id, quantity, price) VALUES

(1, 1, 2, 19.99),

(1, 3, 1, 59.99),

(2, 2, 1, 39.99),

(2, 4, 1, 99.99),

(2, 5, 1, 49.99),

(3, 1, 3, 19.99),

(3, 3, 2, 59.99),

(3, 5, 2, 49.99),

(4, 3, 5, 59.99),

(5, 1, 2, 19.99),

(5, 2, 1, 39.99),

(6, 3, 1, 59.99),

(6, 3, 2, 59.99),

(6, 4, 1, 99.99),

(7, 5, 2, 49.99);

**QUESTIONS**

1. *What is the total revenue for each category?*
2. Which customer has the most orders?
3. What is the average order value for each customer?
4. What is the total revenue for each month?
5. Which products have been ordered the most and how many times?
6. Which customers have ordered a particular product and how many times?
7. What is the average order value for each month?
8. What is the average quantity ordered for each product?
9. Which category has the highest revenue per customer on average?
10. What is the total revenue for each status and month combination?