

## Problem 2: Online Retail Store

Schema:

- Customers(cust\_id INT, name VARCHAR(50), city VARCHAR(30))
- Orders(order\_id INT, cust\_id INT, amount DECIMAL(10,2), order\_date DATE)

Questions:

1. Create both tables with appropriate constraints.
2. Insert at least 4 customers and 5 orders.
3. Display customer names who placed orders above ₹5000.
4. List total order amount placed by each customer in descending order.
5. Retrieve customers who haven't placed any orders.

-- 1. Create Both Tables with Appropriate Constraints

```
CREATE TABLE Customers (  
    cust_id INT PRIMARY KEY,  
    name VARCHAR(50) NOT NULL,  
    city VARCHAR(30)  
);  
  
CREATE TABLE Orders (  
    order_id INT PRIMARY KEY,  
    cust_id INT,  
    amount DECIMAL(10,2) CHECK (amount >= 0),  
    order_date DATE,  
    FOREIGN KEY (cust_id) REFERENCES Customers(cust_id)  
);
```

-- 2. Insert at Least 4 Customers and 5 Orders

-- Inserting Customers

```
INSERT INTO Customers VALUES  
(1, 'Anjali', 'Mumbai'),  
(2, 'Raj', 'Delhi'),  
(3, 'Sneha', 'Bangalore'),  
(4, 'Aman', 'Pune');
```

-- Inserting Orders

```
INSERT INTO Orders VALUES  
(101, 1, 6500.00, '2024-12-01'),  
(102, 2, 4500.00, '2024-12-02'),  
(103, 1, 3000.00, '2024-12-03'),  
(104, 3, 8000.00, '2024-12-05'),  
(105, 2, 10000.00, '2024-12-06');
```

-- 3. Display Customer Names Who Placed Orders Above ₹5000

```
SELECT DISTINCT c.name  
FROM Customers c  
JOIN Orders o ON c.cust_id = o.cust_id  
WHERE o.amount > 5000;
```

```
-- 4. List Total Order Amount Placed by Each Customer in Descending Order
SELECT c.name, SUM(o.amount) AS Total_Amount
FROM Customers c
JOIN Orders o ON c.cust_id = o.cust_id
GROUP BY c.cust_id, c.name
ORDER BY Total_Amount DESC;
```

```
-- 5. Retrieve Customers Who Haven't Placed Any Orders
SELECT c.name
FROM Customers c
LEFT JOIN Orders o ON c.cust_id = o.cust_id
WHERE o.order_id IS NULL;
```