Create tables ( in the order)

Since **Orders** references **Delivery\_Partners** and **Shipments** & **Returns** reference **Orders**, the correct order is:

1. **Delivery\_Partners**
2. **Orders**
3. **Shipments**
4. **Returns**

-- 1️⃣ Create Delivery\_Partners Table First

CREATE TABLE Delivery\_Partners (

partner\_id INT PRIMARY KEY,

name VARCHAR2(100) NOT NULL,

phone VARCHAR2(15) UNIQUE NOT NULL,

vehicle\_type VARCHAR2(20) NOT NULL,

availability\_status VARCHAR2(20) CHECK (availability\_status IN ('Available', 'Unavailable'))

);

-- 2️⃣ Create Orders Table Next (It References Delivery\_Partners)

CREATE TABLE Orders (

order\_id INT PRIMARY KEY,

customer\_id INT NOT NULL,

product\_id INT NOT NULL,

order\_date DATE NOT NULL,

status VARCHAR2(20) NOT NULL,

delivery\_partner\_id INT,

FOREIGN KEY (delivery\_partner\_id) REFERENCES Delivery\_Partners(partner\_id) ON DELETE SET NULL

);

-- 3️⃣ Create Shipments Table (It References Orders & Delivery\_Partners)

CREATE TABLE Shipments (

shipment\_id INT PRIMARY KEY,

order\_id INT NOT NULL,

partner\_id INT NOT NULL,

dispatch\_date DATE NOT NULL,

delivery\_date DATE,

status VARCHAR2(20) CHECK (status IN ('Pending', 'Shipped', 'Delivered')),

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id) ON DELETE CASCADE,

FOREIGN KEY (partner\_id) REFERENCES Delivery\_Partners(partner\_id) ON DELETE SET NULL

);

-- 4️⃣ Create Returns Table (It References Orders)

CREATE TABLE Returns (

return\_id INT PRIMARY KEY,

order\_id INT NOT NULL,

customer\_id INT NOT NULL,

return\_reason VARCHAR2(255) NOT NULL,

refund\_status VARCHAR2(20) CHECK (refund\_status IN ('Refunded', 'Pending')),

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id) ON DELETE CASCADE

);

Inserting the values

Delivery\_Partners

INSERT INTO Delivery\_Partners (partner\_id, name, phone, vehicle\_type, availability\_status)

SELECT 1, 'Ravi Singh', '8888888888', 'Truck', 'Available' FROM dual UNION ALL

SELECT 2, 'Anjali Gupta', '7777777777', 'Bike', 'Unavailable' FROM dual UNION ALL

SELECT 3, 'Rajesh Patel', '6666666666', 'Van', 'Available' FROM dual UNION ALL

SELECT 4, 'Meera Roy', '5555555555', 'Truck', 'Available' FROM dual;

COMMIT;

Orders

INSERT INTO Orders (order\_id, customer\_id, product\_id, order\_date, status)

SELECT 1, 101, 301, TO\_DATE('2024-01-10', 'YYYY-MM-DD'), 'Shipped' FROM dual UNION ALL

SELECT 2, 102, 302, TO\_DATE('2024-01-12', 'YYYY-MM-DD'), 'Pending' FROM dual UNION ALL

SELECT 3, 103, 303, TO\_DATE('2024-01-15', 'YYYY-MM-DD'), 'Delivered' FROM dual UNION ALL

SELECT 4, 104, 304, TO\_DATE('2024-01-18', 'YYYY-MM-DD'), 'Shipped' FROM dual;

COMMIT;

Shipments

INSERT INTO Shipments (shipment\_id, order\_id, partner\_id, dispatch\_date, delivery\_date, status)

SELECT 1, 1, 1, TO\_DATE('2024-01-10', 'YYYY-MM-DD'), TO\_DATE('2024-01-12', 'YYYY-MM-DD'), 'Delivered' FROM dual UNION ALL

SELECT 2, 2, 2, TO\_DATE('2024-01-12', 'YYYY-MM-DD'), TO\_DATE('2024-01-14', 'YYYY-MM-DD'), 'Pending' FROM dual UNION ALL

SELECT 3, 3, 3, TO\_DATE('2024-01-15', 'YYYY-MM-DD'), TO\_DATE('2024-01-18', 'YYYY-MM-DD'), 'Delivered' FROM dual UNION ALL

SELECT 4, 4, 4, TO\_DATE('2024-01-18', 'YYYY-MM-DD'), TO\_DATE('2024-01-20', 'YYYY-MM-DD'), 'Shipped' FROM dual;

COMMIT;

Returns

INSERT INTO Returns (return\_id, order\_id, customer\_id, return\_reason, refund\_status)

SELECT 1, 1, 101, 'Damaged Product', 'Refunded' FROM dual UNION ALL

SELECT 2, 3, 103, 'Wrong Product Delivered', 'Pending' FROM dual UNION ALL

SELECT 3, 4, 104, 'Customer Changed Mind', 'Pending' FROM dual;

COMMIT;