

```

CREATE TABLE Customer (

    Customer_ID INT,
    Customer_Name VARCHAR(35) NOT NULL,
    Customer_Address VARCHAR(100),
    Customer_State CHAR(2) NOT NULL,
    Customer_ZIP INT CHECK(Customer_Zip >= 10000 AND Customer_ZIP <= 999999),

    PRIMARY KEY(Customer_ID)

);

CREATE TABLE Products (

    Product_Id INT,
    Product_Name CHAR(30) UNIQUE,
    Product_Price FLOAT,
    Product_Line_ID SMALLINT CHECK(Product_Line_ID >= 10 AND Product_Line_ID <= 100),

    PRIMARY KEY(Product_ID)

);

CREATE TABLE Sales_Order (

    Order_ID INT,
    Order_Date DATE,
    Customer_ID INT,

    PRIMARY KEY(Order_ID),

    FOREIGN KEY(Customer_ID) REFERENCES Customer(Customer_ID) ON DELETE CASCADE

);

CREATE TABLE Order_Line (

    Order_ID INT,
    Product_ID INT NOT NULL,
    Ordered_Quantity INT,

    PRIMARY KEY(Order_ID, Product_ID),

    FOREIGN KEY(Order_ID) REFERENCES Sales_Order(Order_ID) ON DELETE CASCADE,

    FOREIGN KEY(Product_ID) REFERENCES Products(Product_ID)

);

```

```
INSERT INTO Customer
VALUES (1, 'Simon Li', '1392 Moonset Apt', 'NT', 180059);

INSERT INTO Customer
VALUES (2, 'Goldberg Smith', '6870 Nelson St.', 'CA', 56032);

INSERT INTO Customer
VALUES (3, 'Richard Andrew', '2040 Riverbend Rd.', 'CA', 96710);

INSERT INTO Customer
VALUES (4, 'Catherine Wong', 'Belview St.', 'AZ', 857987);

INSERT INTO Customer
VALUES (5, 'Marie', '7869 Gabriel Road', 'AZ', 857987);

INSERT INTO Customer
VALUES (6, 'Saeed', 'Mountain Hights', 'WS', 857987);
```

```
INSERT INTO Sales_Order
VALUES (200, '01/01/2016', 1);

INSERT INTO Sales_Order
VALUES (201, '01/01/2016', 2);

INSERT INTO Sales_Order
VALUES (202, '02/01/2016', 3);

INSERT INTO Sales_Order
VALUES (203, '03/01/2017', 2);

INSERT INTO Sales_Order
VALUES (204, '10/01/2017', 1);

INSERT INTO Sales_Order
VALUES (205, '10/01/2017', 4);

INSERT INTO Sales_Order
VALUES (206, '10/01/2017', 2);

INSERT INTO Sales_Order
VALUES (207, '10/01/2017', 1);

INSERT INTO Sales_Order
VALUES (208, '10/02/2017', 5);
```

```
INSERT INTO Products
VALUES (1000, 'Office Desk', 105.00, 10);

INSERT INTO Products
VALUES (1001, 'Managers Desk', 209.1, 10);

INSERT INTO Products
VALUES (2000, 'Office Chair', 89.00, 20);

INSERT INTO Products
VALUES (2001, 'Students Desk', 229.5, 20);

INSERT INTO Products
VALUES (3000, 'Book Shelf', 95.00, 30);

INSERT INTO Products
VALUES (3001, 'Duplex Book Shelf', 180.25, 30);

INSERT INTO Products
VALUES (4000, 'Table Lamp', 85.00, 40);

INSERT INTO Products
VALUES (4001, 'Duplex Table Lamp', 90.00, 40);
```

```
INSERT INTO Order_Line VALUES
(200, 4000, 1);

INSERT INTO Order_Line VALUES
(201, 1000, 2);

INSERT INTO Order_Line VALUES
(201, 2000, 2);

INSERT INTO Order_Line VALUES
(202, 3000, 1);

INSERT INTO Order_Line VALUES
(202, 2000, 1);

INSERT INTO Order_Line VALUES
(203, 4001, 1);

INSERT INTO Order_Line VALUES
(204, 2000, 1);

INSERT INTO Order_Line VALUES
(205, 3001, 2);
```

```
INSERT INTO Order_Line VALUES  
(206, 3000, 1);
```

```
INSERT INTO Order_Line VALUES  
(206, 4000, 1);
```

```
INSERT INTO Order_Line VALUES  
(207, 4001, 1);
```

```
SELECT *  
FROM Customer
```

```
SELECT *  
FROM Products
```

```
SELECT *  
FROM Sales_Order
```

```
SELECT *  
FROM Order_Line
```

```
UPDATE Order_Line  
SET Ordered_Quantity=5  
WHERE Order_ID = 201;
```

```
UPDATE Order_Line  
SET Order_ID = 210  
WHERE Order_ID = 201;
```

```
/*It didn't work because Order_ID is foreign key in Orded_Line table  
which refers to the primary key in Sales_Order table. As primary key  
should be unique, you cannot update it.*/
```

```
DROP TABLE Order_Line, Sales_Order, Products, Customer
```