

Exercise 1

- The table is in 1NF, so I will make another ones Normal Forms

```
CREATE TABLE Customer
(
    customerId INT PRIMARY KEY,
    customerName VARCHAR(30),
    city VARCHAR(30)
);

CREATE TABLE Item
(
    itemId INT PRIMARY KEY,
    itemName VARCHAR(30),
    price DECIMAL(7,2)
);

CREATE TABLE "Order"
(
    orderId INT PRIMARY KEY,
    "date" VARCHAR(30)
);

CREATE TABLE common
(
    ord INT NOT NULL PRIMARY KEY,
    oid INT,
    quant INT,
    iId INT,
    cId INT,
    FOREIGN KEY (oId) REFERENCES "Order"(orderid),
    FOREIGN KEY (iId) REFERENCES item(itemid),
    FOREIGN KEY (cId) REFERENCES customer(customerid)
);

INSERT INTO customer (customerid, customername, city)
VALUES (101, 'Martin', 'Prague'),
(107, 'Herman', 'Madrid'),
(110, 'Pedro', 'Moscow');

INSERT INTO item (itemid, itemname, price)
VALUES (3786, 'Net', 35.00),
(4011, 'Racket', 65.00),
(9132, 'Pack-3', 4.75),
(5794, 'Pack-6', 5.00),
(3141, 'Cover', 10.00);

INSERT INTO "Order" (orderid, "date")
VALUES (2301, '23/02/2011'),
(2302, '25/02/2011'),
(2303, '27/02/2011');

INSERT INTO common (ord, oid, cid, iid, quant)
VALUES (1, 2301, 101, 3786, 3),
(2, 2301, 101, 4011, 6),
(3, 2301, 101, 9132, 8),
(4, 2302, 107, 5794, 4),
(5, 2303, 110, 4011, 2),
(6, 2303, 110, 3141, 2);
```

Table customer:

customerid	customername	city
101	Martin	Prague
107	Herman	Madrid
110	Pedro	Moscow

Table item:

itemid	itemname	price
3786	Net	35.00
4011	Racket	65.00
9132	Pack-3	4.75
5794	Pack-6	5.00
3141	Cover	10.00

Table Order:

orderid	date
2301	23/02/2011
2302	25/02/2011
2303	27/02/2011

Table common:

ord	oid	quant	iid	cid
1	2301	3	3786	101
2	2301	6	4011	101
3	2301	8	9132	101
4	2302	4	5794	107
5	2303	2	4011	110
6	2303	2	3141	110

```
SELECT O.oid, SUM(total) as total
FROM (
  SELECT oid, quant, price, SUM(quant*price) as Total
  FROM (common INNER JOIN item ON common.iid = item.itemid) L
  Group BY oid, quant, price
) O
GROUP BY O.oid
```

oid	total
2302	20.00
2303	150.00
2301	533.00