

**Ex1:**

**Initial table:**

orderId	date	customerId	customerName	city	itemId	itemName	quant	price
2301	23/02/2011	101	Martin	Prague	3786	Net	3	35,00
2301	23/02/2011	101	Martin	Prague	4011	Racket	6	65,00
2301	23/02/2011	101	Martin	Prague	9132	Pack-3	8	4,75
2302	25/02/2011	107	Herman	Madrid	5794	Pack-6	4	5,00
2303	27/02/2011	110	Pedro	Moscow	4011	Racket	2	65,00
2303	27/02/2011	110	Pedro	Moscow	3141	Cover	2	10,00

**3NF:**

Orders:

orderId	date	customerId	city
2301	23/02/2011	101	Prague
2302	25/02/2011	107	Madrid
2303	27/02/2011	110	Moscow

Customers:

customerId	customerName
101	Martin
107	Herman
110	Pedro

Items:

orderId	itemId	itemName	price	quant
2301	3786	Net	35,00	3
2301	4011	Racket	65,00	6
2301	9132	Pack-3	4,75	8
2302	5794	Pack-6	5,00	4
2303	4011	Racket	65,00	2
2303	3141	Cover	10,00	2

**QUERIES:**

- 1) SELECT orderId, SUM(DISTINCT quant) AS ordersNum, SUM(quant\*price) AS totalPrice  
FROM Items  
GROUP BY orderId;

```
2) SELECT customerId
FROM Orders
WHERE orderId IN (
SELECT orderId, SUM(DISTINCT quant) AS ordersNum, SUM(quant*price) AS totalPrice
FROM Items
GROUP BY orderId
ORDER BY SUM(DISTINCT quant) desc
LIMIT 1);
```