

## COMP0178: Database Fundamentals

### Query exercises

#### Additional exercises

8. For each date with orders, display how many orders were placed on that date. Sort the results chronologically by date.

```
SELECT date, COUNT(DISTINCT(orderID)) FROM orders  
GROUP BY date ORDER BY date;
```

date Descending	COUNT(DISTINCT(orderID))
Feb 1 2011	11
Feb 12 2011	4
Feb 15 2011	4
Feb 20 2011	4
Feb 22 2011	4
Feb 28 2011	2
Feb 3 2011	1
Feb 5 2011	1
Feb 6 2011	1

9. Which states are responsible for the most money spent on sales? List state and total spent in descending order.

```
SELECT state, SUM(unitcost * quantity) AS totalSpent  
FROM customers c, orders o, lineitems li, items i  
WHERE c.custID = o.custID  
AND o.orderID = li.orderID  
AND li.itemID = i.itemID  
GROUP BY state  
ORDER BY totalSpent DESC;
```

state	totalSpent
Arizona	2459.97
Washington	2217.85
South Carolina	281.72
Colorado	234.24
Oregon	156.75
Wisconsin	8.00

10. List order information (orderID, custID, date) for all orders involving a flashlight.

```

SELECT *
FROM orders
WHERE orderID IN (SELECT orders.orderID
FROM orders, lineitems, items
WHERE orders.orderID = lineitems.orderID
AND lineitems.itemID = items.itemID
AND items.description = "Flashlight");

```

orderID	custID	date
149	10449	Feb 1 2011
134	10330	Feb 15 2011

11. For each supplier, list how many items are stocked by that supplier in this shop.

```

SELECT supplierID, COUNT(itemID)
FROM supplieritems
GROUP BY supplierID;

```

supplierID	COUNT(itemID)
S1	21
S2	11
S3	1

12. List all orders that are still being fulfilled (not all items have been despatched).

```

SELECT DISTINCT(orders.orderID)
FROM orders, lineitems
WHERE orders.orderID = lineitems.orderID
AND despatched < quantity;

```

orderID
120
122
123
124
126
127
131
133
134
139
140
143
144

<b>147</b>
<b>150</b>