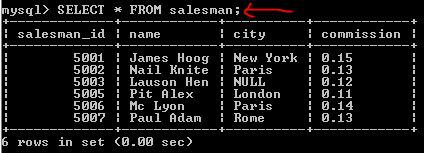
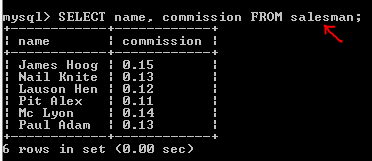
SQL Exercise

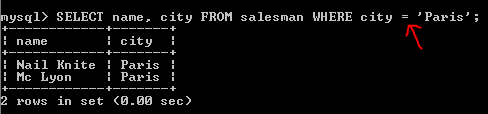
1. SELECT \* FROM salesman;



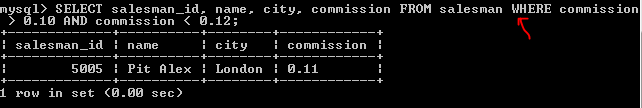
1. SELECT name, commission FROM salesman;



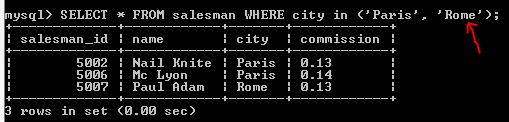
1. SELECT name, city FROM salesman WHERE city = 'Paris';



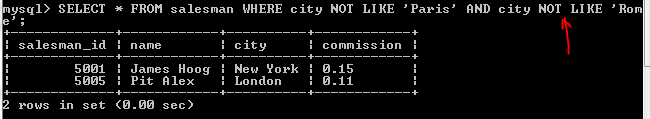
1. SELECT salesman\_id, name, city, commission FROM salesman WHERE commission > 0.10 AND commission < 0.12;



1. SELECT \* FROM salesman WHERE city in ('Paris', 'Rome');



1. ..
2. SELECT \* FROM salesman WHERE city NOT LIKE 'Paris' AND city NOT LIKE 'Rome';



1. SELECT \* FROM salesman WHERE commission BETWEEN 0.12 AND 0.14;



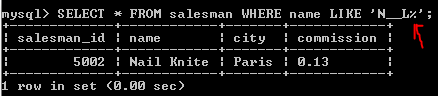
1. SELECT \* FROM salesman WHERE name LIKE ‘[A-K]%’;

DOESNT WORK

1. SELECT \* FROM salesman WHERE name NOT LIKE ‘[A-L]%’;

NOT WORKING

1. SELECT \* FROM salesman WHERE name LIKE ‘N\_\_L%’;

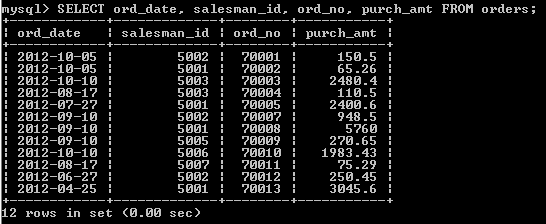


12

SELECT CONCAT(commission, ‘%’) AS commission, salesman\_id, name, city FROM salesman;

Exercise 2

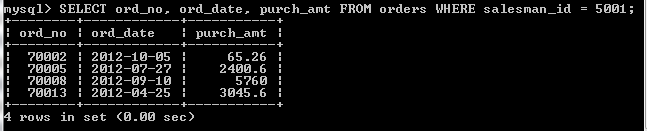
1. SELECT ord\_date, salesman\_id, ord\_no, purch\_amt FROM orders;



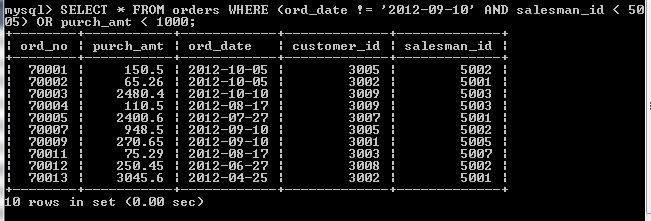
1. SELECT DISTINCT salesman\_id, ord\_no FROM orders;

NOT WORKING

1. SELECT ord\_no, ord\_date, purch\_amt FROM orders WHERE salesman\_id = 5001;



1. SELECT \* FROM orders WHERE (ord\_date != '2012-09-10' AND salesman\_id < 5005) OR purch\_amt < 1000;



5

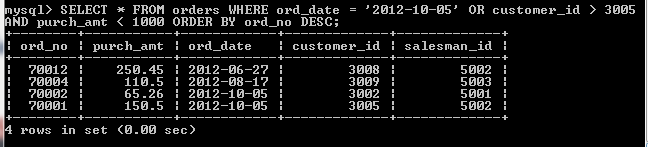
SELECT \* FROM clt6.orders WHERE purch\_amt < 1000

SELECT \* FROM clt6.orders WHERE ord\_date < '2012-10-01';

SELECT \* FROM clt6.orders WHERE customer\_id BETWEEN 3003 AND 3007;

6

SELECT \* FROM orders WHERE ord\_date = '2012-10-05' OR customer\_id > 3005 AND purch\_amt < 1000 ORDER BY ord\_no DESC;



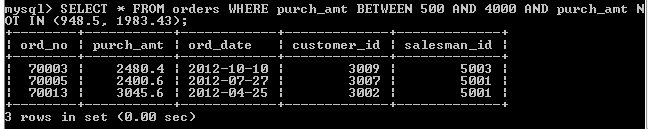
7

??

??

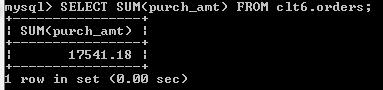
8

SELECT \* FROM orders WHERE purch\_amt BETWEEN 500 AND 4000 AND purch\_amt NOT IN (948.5, 1983.43);



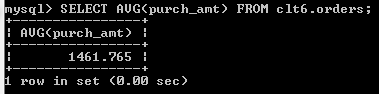
9

SELECT SUM(purch\_amt) FROM clt6.orders;



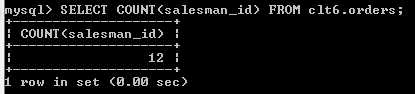
10

SELECT AVG(purch\_amt) FROM clt6.orders;



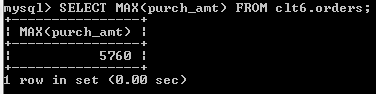
11

SELECT COUNT(salesman\_id) FROM clt6.orders;



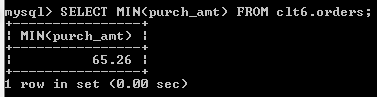
12

SELECT MAX(purch\_amt) FROM clt6.orders;



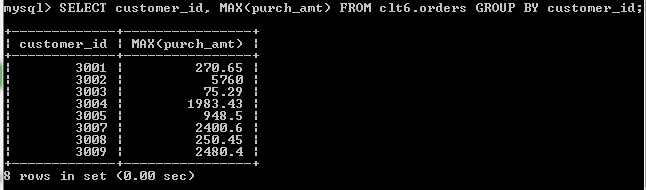
13

SELECT MIN(purch\_amt) FROM clt6.orders;



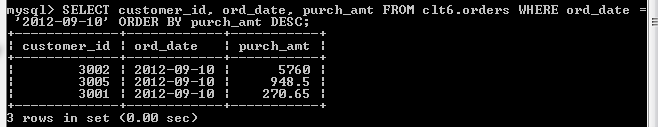
14

SELECT customer\_id, MAX(purch\_amt) FROM clt6.orders GROUP BY customer\_id;



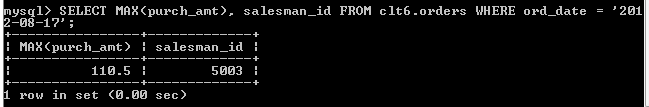
15

SELECT customer\_id, ord\_date, purch\_amt FROM clt6.orders WHERE ord\_date = '2012-09-10' ORDER BY purch\_amt DESC;



16

SELECT MAX(purch\_amt), salesman\_id FROM clt6.orders WHERE ord\_date = '2012-08-17';



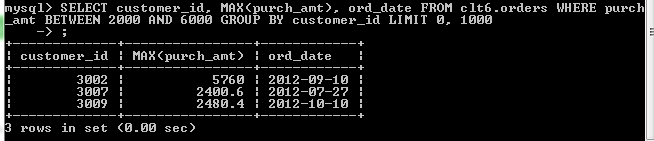
17

SELECT customer\_id, MAX(purch\_amt), ord\_date FROM clt6.orders WHERE purch\_amt > 2000 GROUP BY customer\_id;



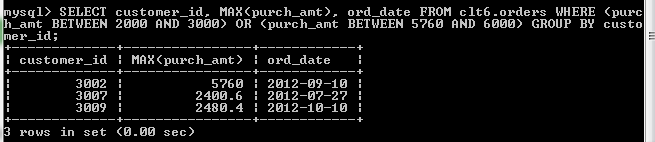
18

SELECT customer\_id, MAX(purch\_amt), ord\_date FROM clt6.orders WHERE purch\_amt BETWEEN 2000 AND 6000 GROUP BY customer\_id LIMIT 0, 1000;



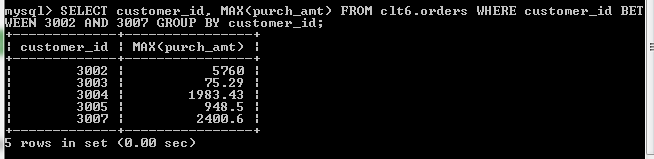
19

SELECT customer\_id, MAX(purch\_amt), ord\_date FROM clt6.orders WHERE (purch\_amt BETWEEN 2000 AND 3000) OR (purch\_amt BETWEEN 5760 AND 6000) GROUP BY customer\_id;



20

SELECT customer\_id, MAX(purch\_amt) FROM clt6.orders WHERE customer\_id BETWEEN 3002 AND 3007 GROUP BY customer\_id;



21

SELECT customer\_id, purch\_amt FROM clt6.orders WHERE customer\_id BETWEEN 3002 AND 3007 AND purch\_amt > 1000 GROUP BY customer\_id;



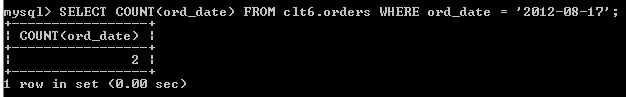
22

SELECT salesman\_id, MAX(purch\_amt) FROM clt6.orders WHERE salesman\_id BETWEEN 5003 AND 5008 GROUP BY purch\_amt;



23

SELECT COUNT(ord\_date) FROM clt6.orders WHERE ord\_date = '2012-08-17';



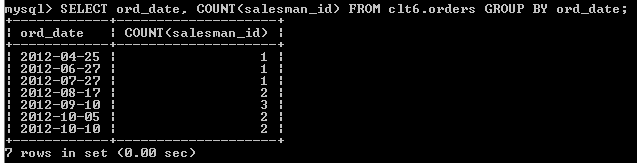
24

SELECT COUNT(salesman\_id) FROM clt6.orders WHERE salesman\_id IS NOT NULL;

Paper said to count CITY?

25

SELECT ord\_date, COUNT(salesman\_id) FROM clt6.orders GROUP BY ord\_date;



26

SELECT

CONCAT('For ',

order\_date,

' there were ',

order\_count,

' orders') AS 'Order Count'

FROM

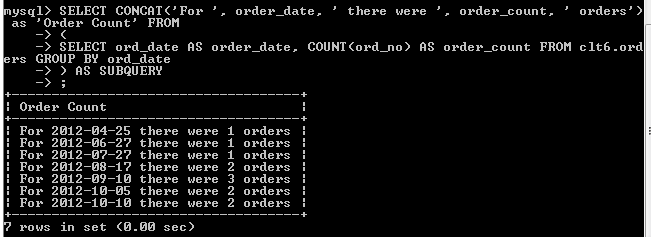
(SELECT

ord\_date AS order\_date, COUNT(ord\_no) AS order\_count

FROM

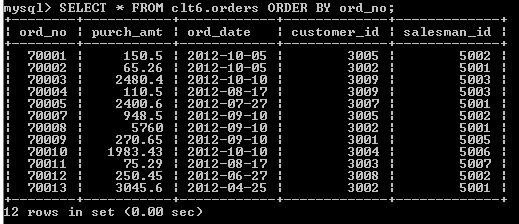
clt6.orders

GROUP BY ord\_date) AS SUBQUERY



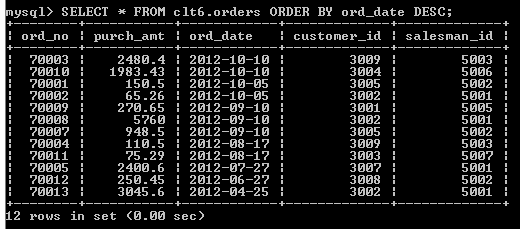
27

SELECT \* FROM clt6.orders ORDER BY ord\_no;



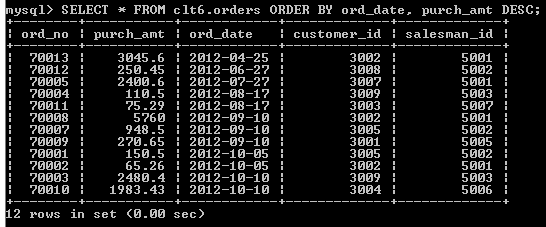
28

SELECT \* FROM clt6.orders ORDER BY ord\_date DESC;



29

SELECT \* FROM clt6.orders ORDER BY ord\_date, purch\_amt DESC;



30

SELECT

salesman\_id as 'Salesman ID',

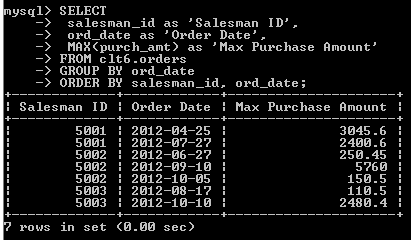
ord\_date as 'Order Date',

MAX(purch\_amt) as 'Max Purchase Amount'

FROM clt6.orders

GROUP BY ord\_date

ORDER BY salesman\_id, ord\_date;



31

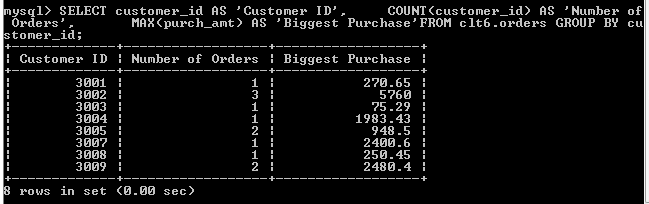
SELECT customer\_id AS 'Customer ID',

COUNT(customer\_id) AS 'Number of Orders',

MAX(purch\_amt) AS 'Biggest Purchase'

FROM clt6.orders

GROUP BY customer\_id;



Exercise - Customer table

1

SELECT \* FROM clt6.customer WHERE grade = 200;



2

SELECT \* FROM clt6.customer WHERE grade > 100;

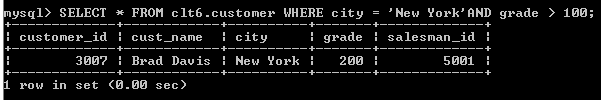


3

SELECT \* FROM clt6.customer

WHERE city = 'New York'

AND grade > 100;



4

SELECT \* FROM clt6.customer

WHERE city = 'New York'

OR grade > 100;

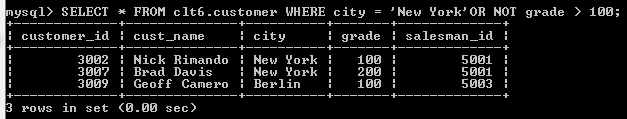


5

SELECT \* FROM clt6.customer

WHERE city = 'New York'

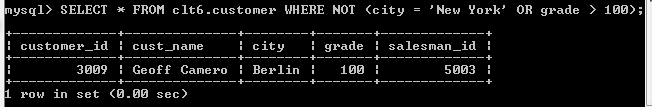
OR NOT grade > 100;



6

SELECT \* FROM clt6.customer

WHERE NOT (city = 'New York' OR grade > 100);



7

SELECT \* FROM clt6.customer

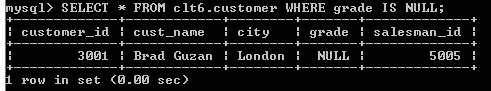
WHERE customer\_id IN (3007, 3008, 3009);



8

SELECT \* FROM clt6.customer

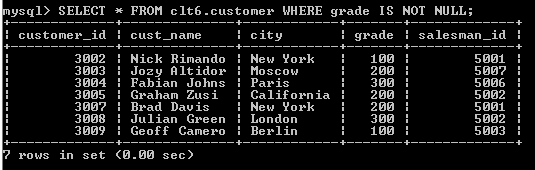
WHERE grade IS NULL;



9

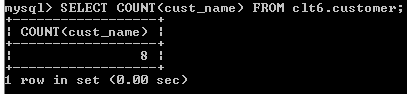
SELECT \* FROM clt6.customer

WHERE grade IS NOT NULL;



10

SELECT COUNT(cust\_name) FROM clt6.customer;



11

Not sure what grade to look for

SELECT *Count*(cust\_name)   
FROM   clt6.customer   
WHERE  grade >= 200;12SELECT   city       AS 'City',   
         *Max*(grade) AS 'Highest Grade'   
FROM     clt6.customer   
GROUP BY city;

12

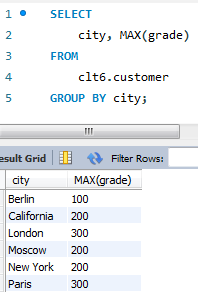
SELECT

city, MAX(grade)

FROM

clt6.customer

GROUP BY city;



13

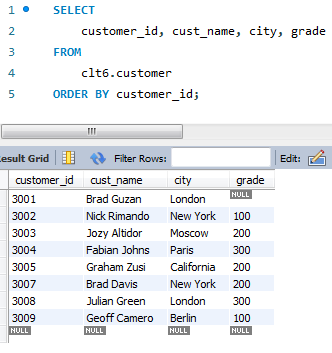
SELECT

customer\_id, cust\_name, city, grade

FROM

clt6.customer

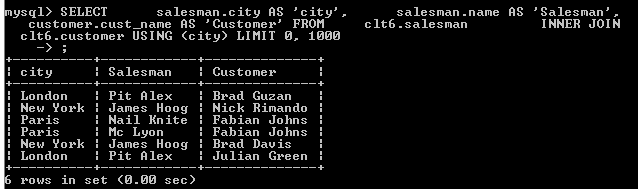
ORDER BY customer\_id;



SQL – Join Exercises

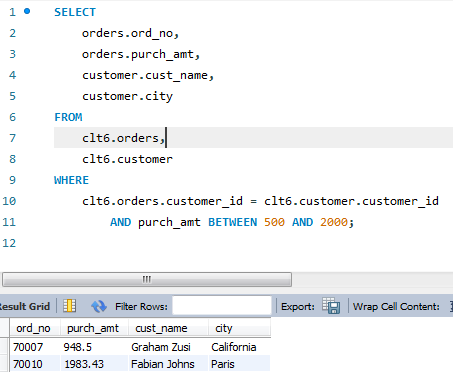
1

SELECT salesman.city AS 'city',salesman.NAME AS 'Salesman',   
       customer.cust\_name AS 'Customer'   
FROM   clt6.salesman   
       INNER JOIN clt6.customer using (city);



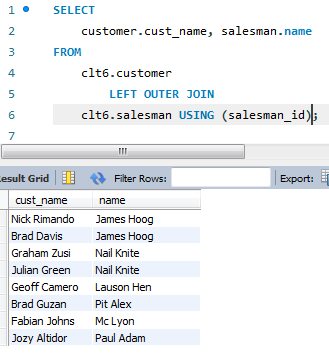
2

SELECT orders.ord\_no,orders.purch\_amt,customer.cust\_name,customer.city   
FROM   clt6.orders,clt6.customer   
WHERE  clt6.orders.customer\_id = clt6.customer.customer\_id   
       AND purch\_amt BETWEEN 500 AND 2000;



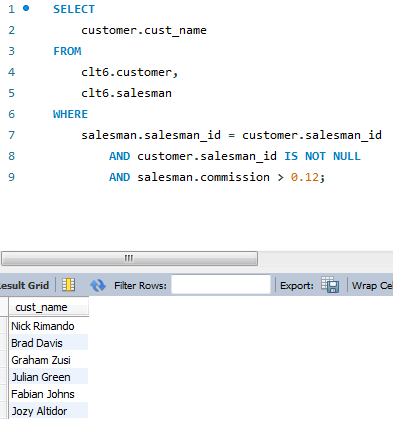
3

SELECT customer.cust\_name,salesman.NAME   
FROM   clt6.customer   
       LEFT OUTER JOIN clt6.salesman using (salesman\_id);



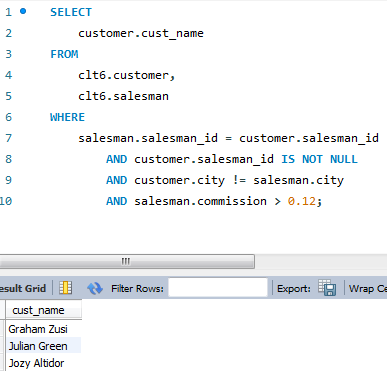
4

SELECT customer.cust\_name   
FROM   clt6.customer,clt6.salesman   
WHERE  salesman.salesman\_id = customer.salesman\_id   
       AND customer.salesman\_id IS NOT NULL   
       AND salesman.commission > 0.12;



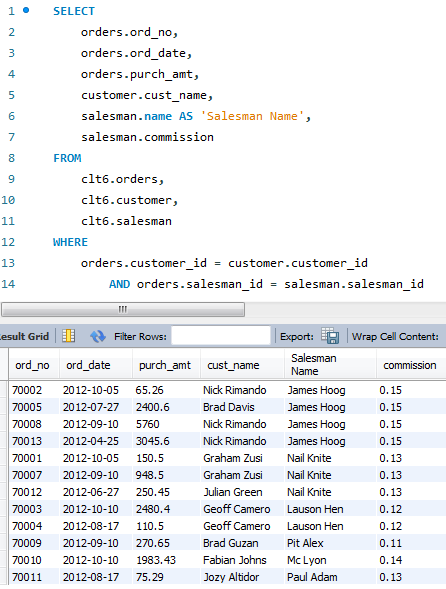
5

SELECT customer.cust\_name   
FROM   clt6.customer,clt6.salesman   
WHERE  salesman.salesman\_id = customer.salesman\_id   
       AND customer.salesman\_id IS NOT NULL   
       AND customer.city != salesman.city   
       AND salesman.commission > 0.12;



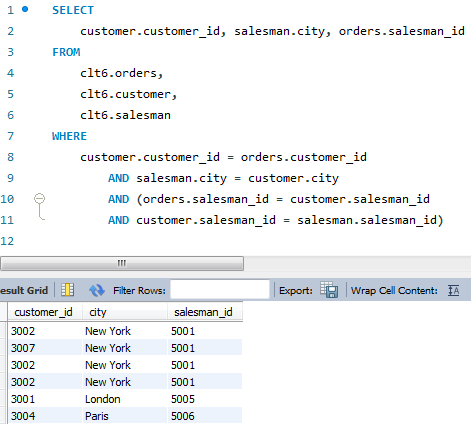
6

SELECT orders.ord\_no,orders.ord\_date,orders.purch\_amt,customer.cust\_name,   
       salesman.NAME AS 'Salesman Name',salesman.commission   
FROM   clt6.orders,clt6.customer,clt6.salesman   
WHERE  orders.customer\_id = customer.customer\_id   
       AND orders.salesman\_id = salesman.salesman\_id



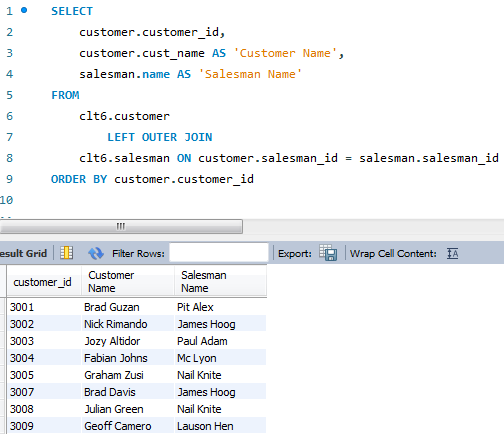
7

SELECT customer.customer\_id,salesman.city,orders.salesman\_id   
FROM   clt6.orders,clt6.customer,clt6.salesman   
WHERE  customer.customer\_id = orders.customer\_id   
       AND salesman.city = customer.city   
       AND ( orders.salesman\_id = customer.salesman\_id   
             AND customer.salesman\_id = salesman.salesman\_id )



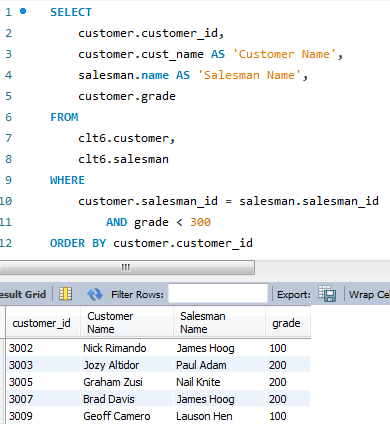
8

SELECT customer.customer\_id,customer.cust\_name AS 'Customer Name',   
       salesman.NAME AS 'Salesman Name'   
FROM   clt6.customer   
       LEFT OUTER JOIN clt6.salesman   
                    ON customer.salesman\_id = salesman.salesman\_id   
ORDER  BY customer.customer\_id



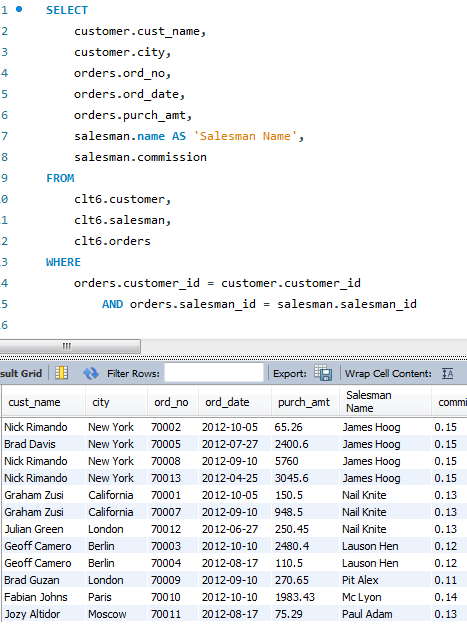
9

SELECT customer.customer\_id,customer.cust\_name AS 'Customer Name',   
       salesman.NAME AS 'Salesman Name',customer.grade   
FROM   clt6.customer,clt6.salesman   
WHERE  customer.salesman\_id = salesman.salesman\_id   
       AND grade < 300   
ORDER  BY customer.customer\_id



10

SELECT customer.cust\_name,customer.city,orders.ord\_no,orders.ord\_date,   
       orders.purch\_amt,   
       salesman.NAME AS 'Salesman Name',salesman.commission   
FROM   clt6.customer,clt6.salesman,clt6.orders   
WHERE  orders.customer\_id = customer.customer\_id   
       AND orders.salesman\_id = salesman.salesman\_id

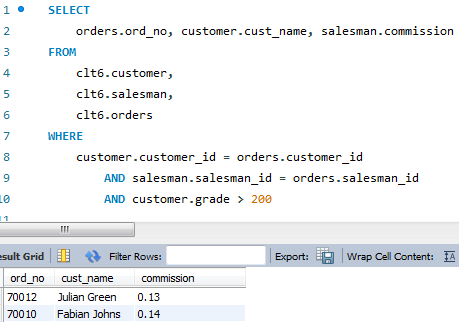


11

12

13

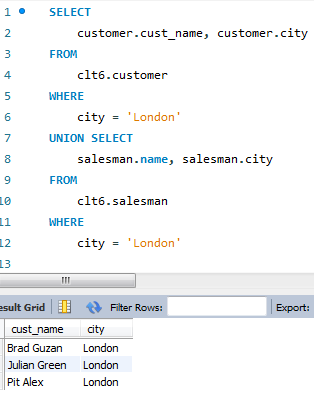
SELECT orders.ord\_no,customer.cust\_name,salesman.commission   
FROM   clt6.customer,clt6.salesman,clt6.orders   
WHERE  customer.customer\_id = orders.customer\_id   
       AND salesman.salesman\_id = orders.salesman\_id   
       AND customer.grade > 200



SQL Union Exercises

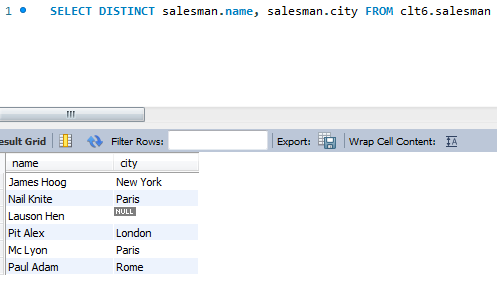
1

SELECT customer.cust\_name,customer.city   
FROM   clt6.customer   
WHERE  city = 'London'   
UNION   
SELECT salesman.NAME,salesman.city   
FROM   clt6.salesman   
WHERE  city = 'London'



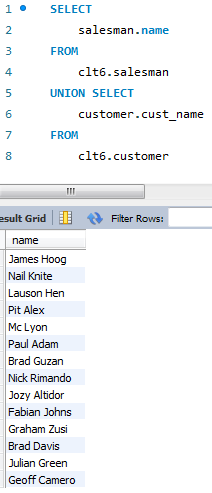
2

SELECT DISTINCT salesman.name, salesman.city FROM clt6.salesman



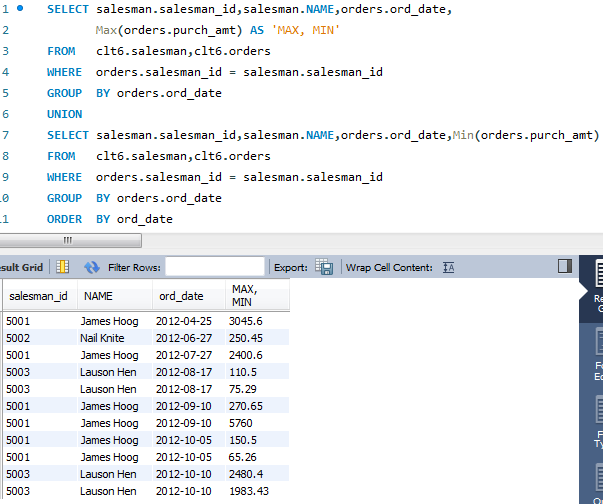
3

SELECT salesman.NAME   
FROM   clt6.salesman   
UNION   
SELECT customer.cust\_name   
FROM   clt6.customer



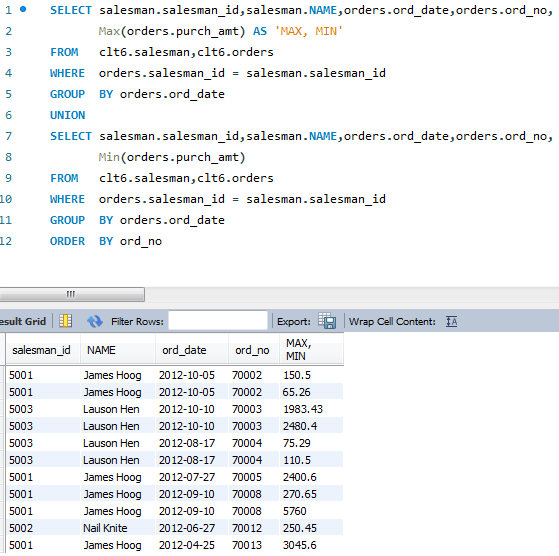
4

SELECT salesman.salesman\_id,salesman.NAME,orders.ord\_date,   
       *Max*(orders.purch\_amt) AS 'MAX, MIN'   
FROM   clt6.salesman,clt6.orders   
WHERE  orders.salesman\_id = salesman.salesman\_id   
GROUP  BY orders.ord\_date   
UNION   
SELECT salesman.salesman\_id,salesman.NAME,orders.ord\_date,*Min*(orders.purch\_amt)   
FROM   clt6.salesman,clt6.orders   
WHERE  orders.salesman\_id = salesman.salesman\_id   
GROUP  BY orders.ord\_date   
ORDER  BY ord\_date



5

SELECT salesman.salesman\_id,salesman.NAME,orders.ord\_date,orders.ord\_no,   
       *Max*(orders.purch\_amt) AS 'MAX, MIN'   
FROM   clt6.salesman,clt6.orders   
WHERE  orders.salesman\_id = salesman.salesman\_id   
GROUP  BY orders.ord\_date   
UNION   
SELECT salesman.salesman\_id,salesman.NAME,orders.ord\_date,orders.ord\_no,   
       *Min*(orders.purch\_amt)   
FROM   clt6.salesman,clt6.orders   
WHERE  orders.salesman\_id = salesman.salesman\_id   
GROUP  BY orders.ord\_date   
ORDER  BY ord\_no



6

SELECT salesman.salesman\_id,salesman.NAME   
FROM   clt6.salesman,clt6.customer   
WHERE  customer.salesman\_id = salesman.salesman\_id   
       AND salesman.city != customer.city   
UNION   
SELECT salesman.salesman\_id,salesman.NAME   
FROM   clt6.salesman,clt6.customer   
WHERE  customer.salesman\_id = salesman.salesman\_id   
       AND salesman.city = customer.city

