**Assignment 7**

1. Write a query that counts all orders for October 3.

select count(Odate) from orders where odate='1990-10-03';

+--------------+

| count(Odate) |

+--------------+

| 5 |

+--------------+

1. Write a query that counts the number of different non-NULL city values in the Customers table.

select city , count(distinct city) from customers group by city;

+----------+----------------------+

| city | count(distinct city) |

+----------+----------------------+

| Berlin | 1 |

| London | 1 |

| Rome | 1 |

| San Jose | 1 |

+----------+----------------------+

1. Write a query that selects each customer’s smallest order.

select cname,min(amt) from orders , customers where customers.cnum=orders.cnum group by cname order by 2;

+----------+----------+

| cname | min(amt) |

+----------+----------+

| Cisneros | 18.69 |

| Grass | 75.75 |

| Hoffman | 767.19 |

| Giovanni | 1713.23 |

| Persia | 1900.10 |

| Clemens | 4723.00 |

| Liu | 5160.45 |

+----------+----------+

7 rows in set (0.00 sec)

1. Write a query that selects the first customer, in alphabetical order, whose name begins with G.

mysql> select \* from customers where cname like 'G%' order by cname limit 1;

+------+----------+------+--------+------+

| Cnum | Cname | City | Rating | Snum |

+------+----------+------+--------+------+

| 2002 | Giovanni | Rome | 200 | 1003 |

+------+----------+------+--------+------+

1 row in set (0.00 sec)

1. select city, max(rating) from customers group by city;

select city, max(rating) from customers group by city;

+----------+-------------+

| city | max(rating) |

+----------+-------------+

| Rome | 200 |

| San Jose | 300 |

| Berlin | 300 |

| London | 100 |

+----------+-------------+

1. rows in set (0.00 sec)
2. Write a query that counts the number of salespeople registering orders for each day. (If a salesperson has more than one order on a given day, he or she should be counted only once.).

select odate , count(distinct snum) from orders group by odate;

+------------+----------------------+

| odate | count(distinct snum) |

+------------+----------------------+

| 1990-10-03 | 4 |

| 1990-10-04 | 2 |

| 1990-10-05 | 1 |

| 1990-10-06 | 2 |

+------------+----------------------+

4 rows in set (0.00 sec)

**Assignment 8**

1. Assume each salesperson has a 12% commission. Write a query on the orders table that will produce the order number, the salesperson number, and the amount of the salesperson’s commission for that order.

select onum , snum , amt, amt\*0.12 as '12% Commission' from orders;

+------+------+---------+----------------+

| onum | snum | amt | 12% Commission |

+------+------+---------+----------------+

| 3001 | 1007 | 18.69 | 2.24 |

| 3003 | 1001 | 767.19 | 92.06 |

| 3002 | 1004 | 1900.10 | 228.01 |

| 3005 | 1002 | 5160.45 | 619.25 |

| 3006 | 1007 | 1098.16 | 131.78 |

| 3009 | 1003 | 1713.23 | 205.59 |

| 3007 | 1002 | 75.75 | 9.09 |

| 3008 | 1001 | 4723.00 | 566.76 |

| 3010 | 1002 | 1309.95 | 157.19 |

| 3011 | 1001 | 9891.88 | 1187.03 |

+------+------+---------+----------------+

1. rows in set (0.00 sec)
2. Write a query on the Customers table that will find the highest rating in each city. Put the output in this form:

For the city (city), the highest rating is : (rating).

select concat('For the city ',city,', the highest rating is :', max(rating) ) as output from customers group by city;

+---------------------------------------------------+

| output |

+---------------------------------------------------+

| For the city Rome, the highest rating is :200 |

| For the city San Jose, the highest rating is :300 |

| For the city Berlin, the highest rating is :300 |

| For the city London, the highest rating is :100 |

+---------------------------------------------------+

4 rows in set (0.00 sec)

1. Write a query that lists customers in descending order of rating. Output the rating field first, followed by the customer’s name and number.

select rating , cname , cnum from customers order by rating desc;

+--------+----------+------+

| rating | cname | cnum |

+--------+----------+------+

| 300 | Grass | 2004 |

| 300 | Cisneros | 2008 |

| 200 | Giovanni | 2002 |

| 200 | Liu | 2003 |

| 100 | Hoffman | 2001 |

| 100 | Clemens | 2006 |

| 100 | Persia | 2007 |

+--------+----------+------+

1. rows in set (0.00 sec)
2. Write a query that totals the orders for each day and places the results in descending order.

select odate , count(onum) from orders group by odate order by odate desc;

+------------+-------------+

| odate | count(onum) |

+------------+-------------+

| 1990-10-06 | 2 |

| 1990-10-05 | 1 |

| 1990-10-04 | 2 |

| 1990-10-03 | 5 |

+------------+-------------+

4 rows in set (0.00 sec)

**Assignment 9**

1. Write a query that lists each order number followed by the name of the customer who made the order.

select onum , cname from orders , customers where orders.cnum=customers.cnum order by onum;

+------+----------+

| onum | cname |

+------+----------+

| 3001 | Cisneros |

| 3002 | Persia |

| 3003 | Hoffman |

| 3005 | Liu |

| 3006 | Cisneros |

| 3007 | Grass |

| 3008 | Clemens |

| 3009 | Giovanni |

| 3010 | Grass |

| 3011 | Clemens |

+------+----------+

10 rows in set (0.01 sec)

1. Write a query that gives the names of both the salesperson and the customer for each order along with the order number.

select sname , cname, onum from salespeople , orders , customers

-> where customers.snum = salespeople.snum and

-> customers.cnum=orders.cnum;

+---------+----------+------+

| sname | cname | onum |

+---------+----------+------+

| Rifkin | Cisneros | 3001 |

| Peel | Hoffman | 3003 |

| Motika | Persia | 3002 |

| Serres | Liu | 3005 |

| Rifkin | Cisneros | 3006 |

| Axelrod | Giovanni | 3009 |

| Serres | Grass | 3007 |

| Peel | Clemens | 3008 |

| Serres | Grass | 3010 |

| Peel | Clemens | 3011 |

+---------+----------+------+

10 rows in set (0.00 sec)

1. Write a query that produces all customers serviced by salespeople with a commission above 12%. Output the customer’s name, the salesperson’s name, and the salesperson’s rate of commission.

select cname , sname , comm from customers , salespeople where salesp

eople.snum= customers.snum and comm > 0.12;

+----------+--------+------+

| cname | sname | comm |

+----------+--------+------+

| Liu | Serres | 0.13 |

| Grass | Serres | 0.13 |

| Cisneros | Rifkin | 0.15 |

+----------+--------+------+