Assignment – 11

Subqueries.

1) Write a query that uses a subquery to obtain all orders for the customer named Cisneros. Assume you do not know his customer number (cnum).

```
mysql> select * from orders where cnum=(select cnum from customers where cname='Cisneros');
+------+---------+------------+------+------+
| Onum | Amt     | Odate      | Cnum | Snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3006 | 1098.16 | 1990-10-03 | 2008 | 1007 |
+------+---------+------------+------+------+
2 rows in set (0.00 sec)

mysql>
```

2) Write a query that produces the names and ratings of all customers who have above-average orders.

```
mysql> ^C
mysql> SELECT cname, rating
    -> FROM customers
    -> WHERE cnum IN (
    ->     SELECT cnum
    ->     FROM orders
    ->     GROUP BY cnum
    ->     HAVING COUNT(*) > (
    ->         SELECT AVG(order_count)
    ->         FROM (
    ->             SELECT cnum, COUNT(*) AS order_count
    ->             FROM orders
    ->             GROUP BY cnum
    ->         ) AS avg_orders
    ->     )
    -> );
+----------+--------+
| cname    | rating |
+----------+--------+
| Grass    |    300 |
| Clemens  |    100 |
| Cisneros |    300 |
+----------+--------+
3 rows in set (0.01 sec)

mysql>
```

3) Write a query that selects the total amount in orders for each salesperson for whom this total is greater than the amount of the largest order in the table.

```
mysql> SELECT Snum, SUM(amt) AS total_order_amount
    -> FROM orders
    -> GROUP BY Snum
    -> HAVING SUM(amt) > (
    ->     SELECT MAX(amt)
    ->     FROM orders
    -> );
+------+--------------------+
| Snum | total_order_amount |
+------+--------------------+
| 1001 |           15382.07 |
+------+--------------------+
1 row in set (0.00 sec)
```