Assignment –7

Summarizing Data with Aggregate Functions.

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

```
mysql> USE sales_db;
Database changed
mysql> SELECT COUNT(*) AS total_orders
    -> FROM Orders
    -> WHERE Odate = '1990-10-03';
+--------------+
| total_orders |
+--------------+
|            5 |
+--------------+
1 row in set (0.06 sec)

mysql>
```

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

```
1 row in set (0.06 sec)

mysql> SELECT COUNT(DISTINCT City) AS distinct_cities
    -> FROM Customers
    -> WHERE City IS NOT NULL;
+-----------------+
| distinct_cities |
+-----------------+
|               4 |
+-----------------+
1 row in set (0.02 sec)
```

3) Write a query that selects each customer's smallest order.

```
mysql> SELECT Cnum, MIN(Amt) AS smallest_order
    -> FROM Orders
    -> GROUP BY Cnum;
+------+----------------+
| Cnum | smallest_order |
+------+----------------+
| 2001 |         767.19 |
| 2002 |        1713.23 |
| 2003 |        5160.45 |
| 2004 |          75.75 |
| 2006 |        4723.00 |
| 2007 |        1900.10 |
| 2008 |          18.69 |
+------+----------------+
7 rows in set (0.01 sec)

mysql>
```

4) 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 (0.01 sec)
```

5) Write a query that selects the highest rating in each city.

```
mysql> SELECT City, MAX(Rating) AS highest_rating
    -> FROM Customers
    -> GROUP BY City;
+----------+----------------+
| City     | highest_rating |
+----------+----------------+
| London   |            100 |
| Rome     |            200 |
| San Jose |            300 |
| Berlin   |            300 |
+----------+----------------+
4 rows in set (0.00 sec)
```

6) 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.).

```
mysql> SELECT Odate, COUNT(DISTINCT Snum) AS salespeople_count
    -> FROM Orders
    -> GROUP BY Odate;
+------------+-------------------+
| Odate      | salespeople_count |
+------------+-------------------+
| 1990-10-03 |                 4 |
| 1990-10-04 |                 2 |
| 1990-10-05 |                 1 |
| 1990-10-06 |                 2 |
+------------+-------------------+
4 rows in set (0.00 sec)
```