

Assignment –7

Summarizing Data with Aggregate Functions

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

```
mysql> select count(*) from orders
-> where Odate = '1990-10-03';
+-----+
| count(*) |
+-----+
|          5 |
+-----+
1 row in set (0.01 sec)
```

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

```
mysql> SELECT COUNT(DISTINCT city)
-> from customers
-> where city is not null;
+-----+
| COUNT(DISTINCT city) |
+-----+
|                      4 |
+-----+
1 row in set (0.01 sec)
```

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

```
mysql> SELECT Cnum, MIN(Amt) AS smallest_order
-> FROM orders
-> WHERE Amt <> 0 AND Amt IS NOT NULL
-> 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)
```

- 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 (0.00 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 (0.01 sec)
```