Assignment –7

Summarizing Data with Aggregate Functions.

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

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

```
KD2-87199-PRATHAMESH@>select * from customers;
+------+----------+----------+--------+------+
| Cnum | Cname    | City     | Rating | Snum |
+------+----------+----------+--------+------+
| 2001 | Hoffman  | London   |    100 | 1001 |
| 2002 | Giovanni | Rome     |    200 | 1003 |
| 2003 | Liu      | San Jose |    200 | 1002 |
| 2004 | Grass    | Berlin   |    300 | 1002 |
| 2006 | Clemons  | London   |    100 | 1001 |
| 2008 | Cisneros | San Rose |    300 | 1007 |
| 2007 | Pereira  | Rome     |    100 | 1004 |
+------+----------+----------+--------+------+
7 rows in set (0.00 sec)

KD2-87199-PRATHAMESH@>select count(*) from customers where city is not null;
+----------+
| count(*) |
+----------+
|        7 |
+----------+
1 row in set (0.00 sec)
```

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

```
KD2-87199-PRATHAMESH@>select cnum, ifnull(min(amt), 0) from orders group by cnum;
+------+---------------------+
| cnum | ifnull(min(amt), 0) |
+------+---------------------+
| 2008 |               18.69 |
| 2001 |              767.19 |
| 2007 |             1900.10 |
| 2003 |             5160.45 |
| 2002 |             1713.23 |
| 2004 |               75.75 |
| 2006 |             4723.00 |
| 2014 |                0.00 |
| 2015 |                0.00 |
+------+---------------------+
9 rows in set (0.00 sec)

KD2-87199-PRATHAMESH@>
```

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

```
KD2-87199-PRATHAMESH@>select min(cname) from customers where cname like 'G%';
+------------+
| min(cname) |
+------------+
| Giovanni   |
+------------+
1 row in set (0.00 sec)

KD2-87199-PRATHAMESH@>
```

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

```
KD2-87199-PRATHAMESH@>select city, max(rating) from customers group by city;
+----------+-------------+
| city     | max(rating) |
+----------+-------------+
| London   |         100 |
| Rome     |         200 |
| San Jose |         200 |
| Berlin   |         300 |
| San Rose |         300 |
+----------+-------------+
5 rows in set (0.00 sec)

KD2-87199-PRATHAMESH@>
```

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.).

```
KD2-87199-PRATHAMESH@>select snum, count(distinct(odate)) orders from orders group by snum;
+------+--------+
| snum | orders |
+------+--------+
| 1001 |      3 |
| 1002 |      3 |
| 1003 |      1 |
| 1004 |      1 |
| 1007 |      1 |
| 1018 |      1 |
| 1019 |      1 |
+------+--------+
7 rows in set (0.00 sec)

KD2-87199-PRATHAMESH@>select * from orders;
+------+---------+------------+------+------+
| Onum | Amt     | Odate      | Cnum | Snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3003 |  767.19 | 1990-10-03 | 2001 | 1001 |
| 3002 | 1900.10 | 1990-10-03 | 2007 | 1004 |
| 3005 | 5160.45 | 1990-10-03 | 2003 | 1002 |
| 3006 | 1098.16 | 1990-10-03 | 2008 | 1007 |
| 3009 | 1713.23 | 1990-10-04 | 2002 | 1003 |
| 3007 |   75.75 | 1990-10-04 | 2004 | 1002 |
| 3008 | 4723.00 | 1990-10-05 | 2006 | 1001 |
| 3010 | 1309.95 | 1990-10-06 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-06 | 2006 | 1001 |
| 3012 |    NULL | 2024-08-30 | 2014 | 1018 |
| 3013 |    0.00 | 2024-08-30 | 2015 | 1019 |
+------+---------+------------+------+------+
```