

Assignment – 12

Using the operators IN, ANY, and ALL.

- 1) Write a query that selects all customers whose ratings are equal to or greater than ANY of Serres'.

```
mysql> SELECT * FROM CUSTOMERS
-> WHERE Rating >= (SELECT Rating FROM SALESPeOPLE WHERE Sname = 'Serres');
+-----+-----+-----+-----+-----+
| 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 | Clemens | London | 100 | 1001 |
| 2008 | Cisneros | San Jose | 300 | 1007 |
| 2007 | Pereira | Rome | 100 | 1004 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

- 2) Write a query using ANY or ALL that will find all salespeople who have no customers located in their city.

```
mysql> select snum, sname from salespeople
-> where salespeople.city != all(select city from customers where
-> customers.snum = salespeople.snum);
+-----+-----+
| snum | sname |
+-----+-----+
| 1004 | Motika |
| 1007 | Rifkin |
| 1003 | Axelrod |
+-----+-----+
3 rows in set (0.06 sec)
```

- 3) Write a query that selects all orders for amounts greater than any for the customers in London.

```
mysql> select customers.cnum, orders.amt from orders,customers
-> where customers.cnum = orders.cnum
-> and orders.amt > any(select amt from orders,customers
-> where orders.cnum = customers.cnum and customers.city = 'london');
+-----+-----+
| cnum | amt |
+-----+-----+
| 2002 | 1713.23 |
| 2003 | 5160.45 |
| 2004 | 1309.95 |
| 2006 | 9891.88 |
| 2006 | 4723.00 |
| 2008 | 1098.16 |
| 2007 | 1900.10 |
+-----+-----+
7 rows in set (0.05 sec)
```

4) Write the above query using MIN or MAX.

```
mysql> select customers.cnum, orders.amt from orders,customers
-> where customers.cnum = orders.cnum
-> and orders.amt > (select min(orders.amt) from orders,customers
-> where orders.cnum = customers.cnum and customers.city = 'london');
+-----+-----+
| cnum | amt |
+-----+-----+
| 2002 | 1713.23 |
| 2003 | 5160.45 |
| 2004 | 1309.95 |
| 2006 | 9891.88 |
| 2006 | 4723.00 |
| 2008 | 1098.16 |
| 2007 | 1900.10 |
+-----+-----+
7 rows in set (0.01 sec)
```