

Assignment – 12

Using the operators IN, ANY, and ALL.

Roll no: 87243

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

```
KD2-87243-kartik@>select * from customers where rating >= ANY (select rating from customers where snum IN (select snum from salespeople where sname = 'Serres'));
+-----+-----+-----+-----+-----+
| Cnum | Cname | city | Rating | Snum |
+-----+-----+-----+-----+
| 2002 | Giovanni | Rome | 200 | 1003 |
| 2003 | Liu | San Jose | 200 | 1002 |
| 2004 | Grass | Berlin | 300 | 1002 |
| 2008 | Cisneros | San Jose | 300 | 1007 |
+-----+-----+-----+-----+
4 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.

```
KD2-87243-kartik@>select snum from salespeople where (snum, city) NOT IN (select snum, city from customers);
+-----+
| snum |
+-----+
| 1004 |
| 1007 |
| 1003 |
+-----+
3 rows in set (0.12 sec)
```

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

```
KD2-87243-kartik@>select * from orders where amt > ANY (select amt from orders where cnum IN (select cnum from customers where city = 'London'));
+-----+-----+-----+-----+-----+
| Onum | Amt | Odate | Cnum | Snum |
+-----+-----+-----+-----+
| 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 |
| 3008 | 4723.00 | 1990-10-05 | 2006 | 1001 |
| 3010 | 1309.95 | 1990-10-06 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-06 | 2006 | 1001 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

4) Write the above query using MIN or MAX.

```
KD2-87243-kartik@>select * from orders where Amt > (select min(Amt) from customers NATURAL JOIN orders where city = 'London');
+-----+-----+-----+-----+-----+
| Onum | Amt | Odate | Cnum | Snum |
+-----+-----+-----+-----+
| 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 |
| 3008 | 4723.00 | 1990-10-05 | 2006 | 1001 |
| 3010 | 1309.95 | 1990-10-06 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-06 | 2006 | 1001 |
+-----+-----+-----+-----+
7 rows in set (0.02 sec)
```