

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'.

```
W1_Minal_93084>SELECT *  
-> FROM Customers  
-> WHERE rating >= ALL (  
->     SELECT rating  
->     FROM Customers  
->     WHERE cname = '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 (0.01 sec)

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

```
W1_Minal_93084>SELECT *  
-> FROM Salespeople s  
-> WHERE s.city <> ALL (  
->     SELECT c.city  
->     FROM Customers c  
->     WHERE c.snum = s.snum  
-> );
```

Snum	Sname	City	Comm
1004	Motika	London	0.11
1007	Rifkin	Barcelona	0.15
1003	Axelrod	New York	0.1

3 rows in set (0.00 sec)

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

```
W1_Minal_93084>SELECT *
-> FROM Orders o
-> WHERE o.amt > ANY (
->     SELECT o2.amt
->     FROM Orders o2
->     JOIN Customers c ON o2.cnum = c.cnum
->     WHERE c.city = 'London'
-> );
```

Onum	Amt	Odate	Cnum	Snum
3002	1900.1	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	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 (0.01 sec)

- 4) Write the above query using MIN or MAX.

```
W1_Minal_93084>SELECT *
-> FROM Orders o
-> WHERE o.amt > (
->     SELECT MIN(o2.amt)
->     FROM Orders o2
->     JOIN Customers c ON o2.cnum = c.cnum
->     WHERE c.city = 'London'
-> );
```

Onum	Amt	Odate	Cnum	Snum
3002	1900.1	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	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)