Assignment 09

1. Write a query that uses a subquery to obtain all orders for the customer named Cisneros. Assume you do not know his customer number (cnum).

Ans: select * from orders where cnum =(select cnum from customers where cname = 'Cisneros');

2. Write a query that produces the names and ratings of all customers who have above average orders

Ans: Select c.cname as Customer_name, c.rating from customers c Inner join orders o ON c.cnum= o.cnum where o.amt > (select avg(amt) from orders)

Group by c.cname, c.rating;

3. Write a query that selects the total amount in orders for each salesperson for whom this total is greater than the amount of the largest order in the table.

Ans: Select snum, sum(amt) from orders group by snum having sum(amt)>(select Max(amt) from orders);

```
D4_PratikSatpute_62758>Select snum , sum(amt) from orders group by snum having sum(amt)>(select Max(amt) from orders);
+----+
| snum | sum(amt) |
+----+
| 1001 | 15382.07 |
+----+
```

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

Ans: Select * from customers where rating >= ANY(select rating from customers where snum = ANY(select snum from salespeople where sname = 'Serres'));

```
D4 PratikSatpute 62758>Select * from customers where rating >= ANY(
select rating from customers where snum = ANY(select snum from sale
speople where sname = 'Serres')) ;
                    city
                                rating
  cnum
         cname
                                         snum
  2002
         Giovanni
                    Rome
                                   200
                                         1003
  2003
         Liu
                    San Jose
                                   200
                                         1002
                    Berlin
  2004
         Grass
                                   300
                                         1002
         Cisneros
  2008
                  San Jose
                                   300
                                         1007
  rows in set (0.01 sec)
```

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

Ans: Select * from salespeople where city != ALL(select city from customers);

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

Ans: Select * from orders where amt > ANY(select amt from orders where cnum =ANY(select cnum from customers where city ='London'));

```
D4 PratikSatpute 62758>Select * from orders where amt > ANY(select
 amt from orders where cnum =ANY(select cnum from customers where
city ='London'));
         amt
                   odate
  onum
                                 cnum
                                        snum
  3002
         1900.10
                   1990-10-03
                                 2007
                                        1004
  3005
         5160.45
                   1990-10-03
                                 2003
                                        1002
         1098.16
  3006
                   1990-10-03
                                 2008
                                        1007
         1713.23
  3009
                   1990-10-04
                                 2002
                                        1003
  3008
         4723.00
                   1990-10-04
                                 2006
                                        1001
         9891.88 | 1990-10-04
  3011
                                 2006
                                        1001
 rows in set (0.00 sec)
```

7. Extract all the orders of Motika.

Ans: Select * from orders where snum = ALL(select snum from salespeople where sname='Motika');

Select s.sname, o.onum, o.amt,o.odate, o.cnum,o.snum from salespeople s inner join orders o ON s.snum = o.snum where o.snum = ALL(select snum from salespeople where sname='Motika');

8. Find all the order attribute to salespeople servicing customers in London.

Ans: Select * from orders where snum = ALL(select snum from salespeople Where snum = ALL(select snum from customers where city ='London'));

```
D4 PratikSatpute 62758>Select st from orders where snum = ALL(select snum from s
alespeople Where snum = ALL(select snum from customers where city ='London'));
  onum
                   odate
                                 cnum
                                        snum
  3003
          767.19
                   1990-10-03
                                 2001
                                        1001
  3008
         4723.00
                   1990-10-04
                                 2006
                                        1001
  3011
         9891.88
                   1990-10-04
                                 2006
                                        1001
  rows in set (0.00 sec)
```

Select * from orders where snum = ALL(select snum from customers where city = 'London');

```
D4_PratikSatpute_62758>Select * from orders where snum = ALL(select snum
from customers where city ='London');
  onum
                   odate
                                 cnum
  3003
          767.19
                    1990-10-03
                                 2001
                                         1001
  3008
         4723.00
                   1990-10-04
                                 2006
                                         1001
  3011
         9891.88
                   1990-10-04
                                 2006
                                         1001
```

9. Find names and numbers of all salesperson who have more than one customer

Ans: Select * from salespeople where snum= ANY(select snum from customers group by snum having count(snum)>=2);

10. Find salespeople number, name and city who have multiple customers

Ans: Select snum, sname, city from salespeople where snum = ANY(select snum from customers group by snum having count(snum)>1);

11. Select customers who have a greater rating than any other customer in Rome.

Ans: Select * from customers where rating = ANY(select rating from customers where city='Rome') AND city != 'Rome';

```
D4_PratikSatpute_62758>Select * from customers where rating = ANY(select rating
 rom customers where city='Rome') AND city != 'Rome';
                   city
                              rating
 cnum
        cname
                                       snum
 2001
        Hoffman
                   London
                                 100
                                        1001
  2003
         Liu
                   San Jose
                                 200
                                        1002
        Clemens
                                       1001
  2006
                   London
                                 100
 rows in set (0.00 sec)
```

12. Select all orders that had amounts that were greater that at least one of the orders from '1990-10-04'.

Ans:

Select * from orders where amt >ANY(select amt from orders where odate='1990-10-04');

```
D4_PratikSatpute_62758>Select * from orders where amt >ANY(select amt from orders
 where odate='1990-10-04');
  onum
        amt
                   odate
                                cnum
  3003
          767.19
                   1990-10-03
                                2001
                                       1001
  3002
        1900.10
                  1990-10-03
                                2007
                                       1004
  3005
        5160.45
                                2003
                                       1002
                   1990-10-03
  3006
         1098.16
                                2008
                   1990-10-03
                                       1007
        1713.23
                   1990-10-04
                                2002
  3009
                                       1003
  3008
        4723.00
                   1990-10-04
                                2006
                                       1001
          309.95
                                2004
  3010
                   1990-10-04
                                       1002
                  1990-10-04
  3011
        9891.88
                                2006
                                       1001
 rows in set (0.00 sec)
```

Select * from orders where amt >(select min(amt) from orders where odate='1990-10-04');

```
D4_PratikSatpute_62758>Select * from orders where amt >(select min(amt) from
orders where odate='1990-10-04');
  onum
        amt
                 odate
                              cnum
                                     snum
  3003
         767.19
                  1990-10-03
                                2001
                                       1001
  3002
        1900.10
                  1990-10-03
                                2007
                                       1004
        5160.45
  3005
                 1990-10-03
                                2003
                                      1002
  3006
        1098.16
                  1990-10-03
                                2008
                                       1007
  3009
        1713.23 | 1990-10-04
                              2002
                                      1003
  3008
        4723.00
                  1990-10-04
                                2006
                                      1001
  3010
         309.95
                  1990-10-04
                                2004
                                      1002
  3011
        9891.88 | 1990-10-04 | 2006
                                      1001
 rows in set (0.00 sec)
```

13. Find all orders with amounts smaller than any amount for a customer in San Jose.

Ans: Select * from orders where snum < ANY(select snum from customers where city = 'San jose');

```
D4_PratikSatpute_62758>Select * from orders where snum < ANY(select snum from
customers where city = 'San jose');
  onum
       amt
                   odate
                                 cnum
                                        snum
          767.19
                   1990-10-03
  3003
                                 2001
                                        1001
         1900.10
                                        1004
  3002
                   1990-10-03
                                 2007
  3005
         5160.45
                   1990-10-03
                                 2003
                                        1002
  3009
         1713.23
                   1990-10-04
                                 2002
                                        1003
           75.75
  3007
                   1990-10-04
                                 2004
                                        1002
  3008
         4723.00
                   1990-10-04
                                 2006
                                        1001
  3010
          309.95
                   1990-10-04
                                 2004
                                        1002
  3011
         9891.88
                   1990-10-04
                                 2006
                                        1001
  rows in set (0.00 sec)
```

14. Select those customers whose rating are higher than every customer in Paris.

Ans: Select * from customers where rating > ALL(select rating from customers where city ='Paris');

```
D4 PratikSatpute 62758>Select * from customers where rating > ALL(select rating
 from customers where city ='Paris');
                    city
                               rating snum
        cname
  2001
         Hoffman
                    London
                                   100
                                         1001
  2002
        Giovanni
                    Rome
                                   200
                                         1003
  2003
         Liu
                    San Jose
                                   200
                                         1002
  2004
                                   300
         Grass
                    Berlin
                                         1002
  2006
        Clemens
                    London
                                   100
                                         1001
  2008
        Cisneros
                    San Jose
                                   300
                                         1007
        Pereira
  2007
                    Rome
                                   100
                                         1004
 rows in set (0.00 sec)
```