Assignment –5 Relational and Logical Operators.

1) Write a query that will give you all orders for more than Rs. 1,000.

```
KD3_86927_Vivek@>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 |
+-------+---------+------------+-------+-------+
10 rows in set (0.00 sec)

KD3_86927_Vivek@>SELECT Amt from orders
    -> WHERE Amt > 1000.00;
+---------+
| Amt     |
+---------+
| 1900.10 |
| 5160.45 |
| 1098.16 |
| 1713.23 |
| 4723.00 |
| 1309.95 |
| 9891.88 |
+---------+
7 rows in set (0.00 sec)

KD3_86927_Vivek@>
```

2) Write a query that will give you the names and cities of all salespeople in London with a commission above .10.

```
KD3_86927_Vivek@>SELECT * FROM SALESPEOPLE;
+-------+---------+-----------+-------+
| Snum  | Sname   | City      | Comm  |
+-------+---------+-----------+-------+
| 1001  | Peel    | London    | 0.12  |
| 1002  | Serres  | San Jose  | 0.13  |
| 1004  | Motika  | London    | 0.11  |
| 1007  | Rifkin  | Barcelona | 0.15  |
| 1003  | Axelrod | New York  | 0.10  |
+-------+---------+-----------+-------+
5 rows in set (0.00 sec)

KD3_86927_Vivek@>SELECT SNAME, CITY FROM SALESPEOPLE
    -> WHERE CITY = 'London' and COMM > 0.10;
+---------+---------+
| SNAME   | CITY    |
+---------+---------+
| Peel    | London  |
| Motika  | London  |
+---------+---------+
2 rows in set (0.00 sec)

KD3_86927_Vivek@>
```

3) Write a query on the Customers table whose output will exclude all customers with a rating <= 100, unless they are located in Rome.

```
KD3_86927_Vivek@>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 | Clemens  | London   |    100 | 1001 |
| 2008 | Cisneros | San Jose |    300 | 1007 |
| 2007 | Pereira  | Rome     |    100 | 1004 |
+------+----------+----------+--------+------+
7 rows in set (0.00 sec)

KD3_86927_Vivek@>SELECT * FROM CUSTOMERS
    -> WHERE RATING >100 OR CITY = 'Rome';
+------+----------+----------+--------+------+
| 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 |
| 2007 | Pereira  | Rome     |    100 | 1004 |
+------+----------+----------+--------+------+
5 rows in set (0.00 sec)
```

4) What will be the output from the following query?

   Select * from Orders
           where (amt < 1000 OR
                   NOT (odate = '1990-10-03'
                       AND cnum > 2003));

```
KD3_86927_Vivek@>SELECT * FROM ORDERS
    -> WHERE (AMT < 1000 OR NOT (ODATE = '1990-10-03' AND CNUM >2003));
+-------+---------+------------+------+------+
| Onum  | Amt     | Odate      | Cnum | Snum |
+-------+---------+------------+------+------+
| 3001  |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3003  |  767.19 | 1990-10-03 | 2001 | 1001 |
| 3005  | 5160.45 | 1990-10-03 | 2003 | 1002 |
| 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 |
+-------+---------+------------+------+------+
8 rows in set (0.00 sec)

KD3_86927_Vivek@>
```

5) What will be the output of the following query?

   Select * from Orders
   where NOT ((odate = '1990-10-03' OR snum > 1006) AND amt >= 1500);

```
KD3_86927_Vivek@>SELECT * FROM ORDERS
    -> WHERE NOT((ODATE = '1990-10-03' OR SNUM > 1006) AND AMT >= 1500);
+-------+---------+------------+------+------+
| Onum  | Amt     | Odate      | Cnum | Snum |
+-------+---------+------------+------+------+
| 3001  |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3003  |  767.19 | 1990-10-03 | 2001 | 1001 |
| 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 |
+-------+---------+------------+------+------+
8 rows in set (0.00 sec)

KD3_86927_Vivek@>
```

6) What is a simpler way to write this query?

Select snum, sname, city, comm From Salespeople
where (comm > .12 OR comm <.14);

```
KD3_86927_Vivek@>Select snum, sname, city, comm From Salespeople where (comm > .12 OR comm <.14);
+-------+---------+-----------+------+
| snum  | sname   | city      | comm |
+-------+---------+-----------+------+
| 1001  | Peel    | London    | 0.12 |
| 1002  | Serres  | San Jose  | 0.13 |
| 1004  | Motika  | London    | 0.11 |
| 1007  | Rifkin  | Barcelona | 0.15 |
| 1003  | Axelrod | New York  | 0.10 |
+-------+---------+-----------+------+
5 rows in set (0.00 sec)

KD3_86927_Vivek@>SELECT * FROM SALESPEOPLE;
+-------+---------+-----------+------+
| Snum  | Sname   | City      | Comm |
+-------+---------+-----------+------+
| 1001  | Peel    | London    | 0.12 |
| 1002  | Serres  | San Jose  | 0.13 |
| 1004  | Motika  | London    | 0.11 |
| 1007  | Rifkin  | Barcelona | 0.15 |
| 1003  | Axelrod | New York  | 0.10 |
+-------+---------+-----------+------+
```