Assignment –5

Relational and Logical Operators.

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

```
mysql> select * from orders where Amt>1000;
+-------+---------+------------+------+------+
| 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 (0.03 sec)
```

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

```
mysql> select Sname,City from salespeople where City='London' and comm > .10
;
+--------+--------+
| Sname  | City   |
+--------+--------+
| Peel   | London |
| Motika | London |
+--------+--------+
2 rows in set (0.00 sec)
```

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

```
mysql> select * from customers where rating >100 or (rating <= 100 and 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));

```
mysql> Select * from Orders where (amt < 1000 OR NOT (odate = '1990-10-03' A
ND 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)
```

the output of the query is all columns from orders table where amount is less than thousand or where Cdate is equal to 1990-10-003 and Cnum is grater than 2003.. so output only gets 8 rows out of 10 .

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);

```
mysql> 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)
```

- Select Query select all column from orders Table where Rows are not odate as 1990-10-03 or snum is greater than 1006 and Amount is Greater than or equal to 1500;
- Its returns the 8 rows from the 10 rows of orders table. Which condition are satified

6) What is a simpler way to write this query? Select snum, sname, city, comm From Salespeople where (comm > .12 OR comm <.14);

```
mysql> 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)
```

After simpler way -

```
mysql> select * from salespeople where comm not in (0.12 , 0.14);
+-------+---------+-----------+-------+
| 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)
```