# *Assignment –5*

**Relational and Logical Operators.**

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

**Select * from Orders where Amt > 1000;**

```
W1_89793_Saurabh>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 (0.00 sec)
```

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

**Select Sname, City from salespeople where City = 'London' and comm > .10;**

```
W1_89793_Saurabh>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.

**Select * from customers where Rating > 100 or City = 'Rome';**

```
W1_89793_Saurabh>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));

```
W1_89793_Saurabh>use classwork;
Database changed
W1_89793_Saurabh>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)
```

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);

```
W1_89793_Saurabh>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)
```

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

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

```
W1_89793_Saurabh>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)

W1_89793_Saurabh>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)
```