

### 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;
```

```
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 (0.01 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 comm>0.10;
```

```
mysql> select sname,city from salespeople where comm>0.10;
+-----+-----+
| sname | city   |
+-----+-----+
| Peel  | London |
| Serres | San Jose |
| Motika | London |
| Rifkin | Barcelona |
+-----+-----+
4 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');
```

```
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));

Ans. The query selects the order details that are having amount less than 1000 or not having order date on 3<sup>rd</sup> October 1990 and whose cnum is greater than 2003.

```
mysql> 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 (0.01 sec)
```

```
mysql> |
```

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);

Ans. The query retrieves all records from the Orders table where not both of the following conditions are true:

1. The order date (odate) is '1990-10-03' OR the salesperson number (snum) is greater than 1006.
2. The amount (amt) is greater than or equal to 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)
```

```
mysql> |
```

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

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

Ans. Select \* From Salespeople;

This query can be simplified by observing that the condition (comm > .12 OR comm < .14) will include all rows because any commission will either be greater than 0.12 or less than 0.14.

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