1. Write a query that produces all rows from the Customers table for which the salesperson's number is 1001.

mysql> show tables;

```
+-----------------+
| Tables_in_sales |
+-----------------+
| customers       |
| orders          |
| salespeople     |
+-----------------+
3 rows in set (0.00 sec)
```

mysql> 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)
```

mysql> SELECT * FROM customers WHERE snum=1001;

```
+------+---------+--------+--------+------+
| cnum | cname   | city   | rating | snum |
+------+---------+--------+--------+------+
| 2001 | Hoffman | London |    100 | 1001 |
| 2006 | Clemens | London |    100 | 1001 |
+------+---------+--------+--------+------+
2 rows in set (0.00 sec)
```

2. Write a select command that produces the rating followed by the name of each customer in San Jose.

mysql> SELECT cname,rating FROM customers WHERE city='San Jose';

```
+----------+--------+
| cname    | rating |
+----------+--------+
| Liu      |    200 |
| Cisneros |    300 |
+----------+--------+
```

3. Write a query that will produce the snum values of all salespeople from the Orders table (with the duplicate values suppressed).
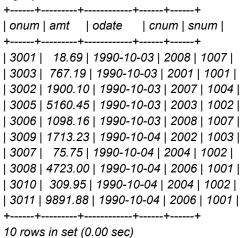
mysql> SELECT * FROM ORDERS;
```
+------+---------+------------+------+------+
| onum | amt     | odate      | cnum | snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3003 |  767.19 | 1990-10-03 | 2001 | 1001 |
| 3002 | 1900.10 | 1990-10-03 | 2007 | 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
10 rows in set (0.00 sec)
```

mysql> SELECT DISTINCT snum FROM Orders;
```
+------+
| snum |
+------+
| 1007 |
| 1001 |
| 1004 |
| 1002 |
| 1003 |
+------+
```

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

mysql> 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
10 rows in set (0.00 sec)
```

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 | 1990-10-04 | 2006 | 1001 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
6 rows in set (0.00 sec)
```

5. Write a query that will give you the names and cities of all salespeople in London with a commission above 0.10.

```
mysql> 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)

mysql> 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)
```

6. 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;
+------+----------+----------+--------+------+
| 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)
```

mysql> select * from customers WHERE city='Rome' OR rating>100;

```
+------+----------+----------+--------+------+
| 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)
```

7. 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;

```
+------+---------+------------+------+------+
| 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```

mysql> SELECT * FROM Orders WHERE odate = '1990-10-03' AND cnum>2003;

```
+------+---------+------------+------+------+
| onum | amt     | odate      | cnum | snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3002 | 1900.10 | 1990-10-03 | 2007 | 1004 |
| 3006 | 1098.16 | 1990-10-03 | 2008 | 1007 |
+------+---------+------------+------+------+
```

mysql> SELECT * FROM Orders WHERE NOT (odate = '1990-10-03' AND cnum>2003);

```
+------+---------+------------+------+------+
| onum | amt     | odate      | cnum | snum |
+------+---------+------------+------+------+
| 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```

mysql> SELECT * FROM Orders WHERE AMT<1000;

```
+------+--------+------------+------+------+
| onum | amt    | odate      | cnum | snum |
+------+--------+------------+------+------+
| 3001 |  18.69 | 1990-10-03 | 2008 | 1007 |
| 3003 | 767.19 | 1990-10-03 | 2001 | 1001 |
| 3007 |  75.75 | 1990-10-04 | 2004 | 1002 |
| 3010 | 309.95 | 1990-10-04 | 2004 | 1002 |
+------+--------+------------+------+------+
```

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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```

8. 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;

```
+------+---------+------------+------+------+
| 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```

mysql> Select * from Orders WHERE (odate='1990-10-03' OR snum>1006);

```
+------+---------+------------+------+------+
| 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 |
+------+---------+------------+------+------+
```

mysql> Select * from Orders WHERE ((odate='1990-10-03' OR snum>1006) AND amt>=1500);

```
+------+---------+------------+------+------+
| onum | amt     | odate      | cnum | snum |
+------+---------+------------+------+------+
| 3002 | 1900.10 | 1990-10-03 | 2007 | 1004 |
| 3005 | 5160.45 | 1990-10-03 | 2003 | 1002 |
+------+---------+------------+------+------+
```

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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```

9. 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 |
+------+---------+-----------+------+
```

mysql> Select * 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 |
+------+---------+-----------+------+
```

10. Write a query that selects all orders except those with zeroes or NULLs in the amt field.

```
mysql> 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 | 1990-10-04 | 2006 | 1001 |
| 3010 |  309.95 | 1990-10-04 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-04 | 2006 | 1001 |
+------+---------+------------+------+------+
```