1) Write a command that will enable a user to pull orders grouped by date out of the Orders table quickly.

```
w3_93119_sushant>^C
w3_93119_sushant>create index ind_orders_odate on orders (odate);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

w3_93119_sushant>select odate , sum(amt), count(*) from orders group by odate;
+------------+----------+----------+
| odate      | sum(amt) | count(*) |
+------------+----------+----------+
| 1990-10-03 |  8944.59 |        5 |
| 1990-10-04 |  1788.98 |        2 |
| 1990-10-06 |  9891.88 |        1 |
+------------+----------+----------+
3 rows in set (0.01 sec)
```

2) If the Orders table has already been created, how can you force the onum field to be unique (assume all current values are unique)?

```
ruers)     at tine 1
w3_93119_sushant>insert into orders(onum)    select 1234 where 1234 not in (select onum from orders);
Query OK, 1 row affected (0.01 sec)
Records: 1  Duplicates: 0  Warnings: 0

w3_93119_sushant>select * from orders;
+------+---------+------------+------+------+
| Onum | Amt     | Odate      | Cnum | Snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3003 |  767.19 | 1990-10-03 | 2008 | 1007 |
| 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 |
| 3010 | 9891.88 | 1990-10-06 | 2004 | 1002 |
| 1234 |    NULL | NULL       | NULL | NULL |
+------+---------+------------+------+------+
9 rows in set (0.00 sec)
```

3) Create an index that would permit each salesperson to retrieve his or her orders grouped by date quickly.

```
ERROR 1072 (42000): Key column  date  doesn't exist in table   .
w3_93119_sushant>create index index_orders_odate on orders (snum,odate);
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

w3_93119_sushant>select odate ,count(onum),sum(amt) from orders group by odate;
+------------+-------------+----------+
| odate      | count(onum) | sum(amt) |
+------------+-------------+----------+
| NULL       |           1 |     NULL |
| 1990-10-03 |           5 |  8944.59 |
| 1990-10-04 |           2 |  1788.98 |
| 1990-10-06 |           1 |  9891.88 |
+------------+-------------+----------+
4 rows in set (0.00 sec)
```

4) Let us assume that each salesperson is to have only one customer of a given rating, and that this is currently the case. Enter a command that enforces it.

```
for the right syntax to use near 'UQ_CUST_RATING UNIQUE (SNUM , RATING)' at line 2
w3_93119_sushant>ALTER TABLE CUSTOMERS
    -> ADD CONSTRAINT UQ_CUST_RATING UNIQUE (SNUM , RATING);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

w3_93119_sushant>SELECT * FROM CUSTOMERS;
+-------+----------+-----------+--------+-------+
| Cnum  | Cname    | City      | Rating | Snum  |
+-------+----------+-----------+--------+-------+
|  2002 | Giovanni | Rome      |    300 |  1003 |
|  2003 | Liu      | San Jose  |    300 |  1002 |
|  2004 | Grass    | Berlin    |    400 |  1002 |
|  2008 | Cisneros | San Jose  |    400 |  1007 |
|  2007 | Pereira  | Rome      |    200 |  1004 |
+-------+----------+-----------+--------+-------+
5 rows in set (0.00 sec)

w3_93119_sushant>
```