ASSIGNMENT 3

QUESTIONS

Q1.Create Database

Q2.Design Schema

Q3.Create tables

Q4.Insert sample data

Q5.Find the sales person have multiple orders

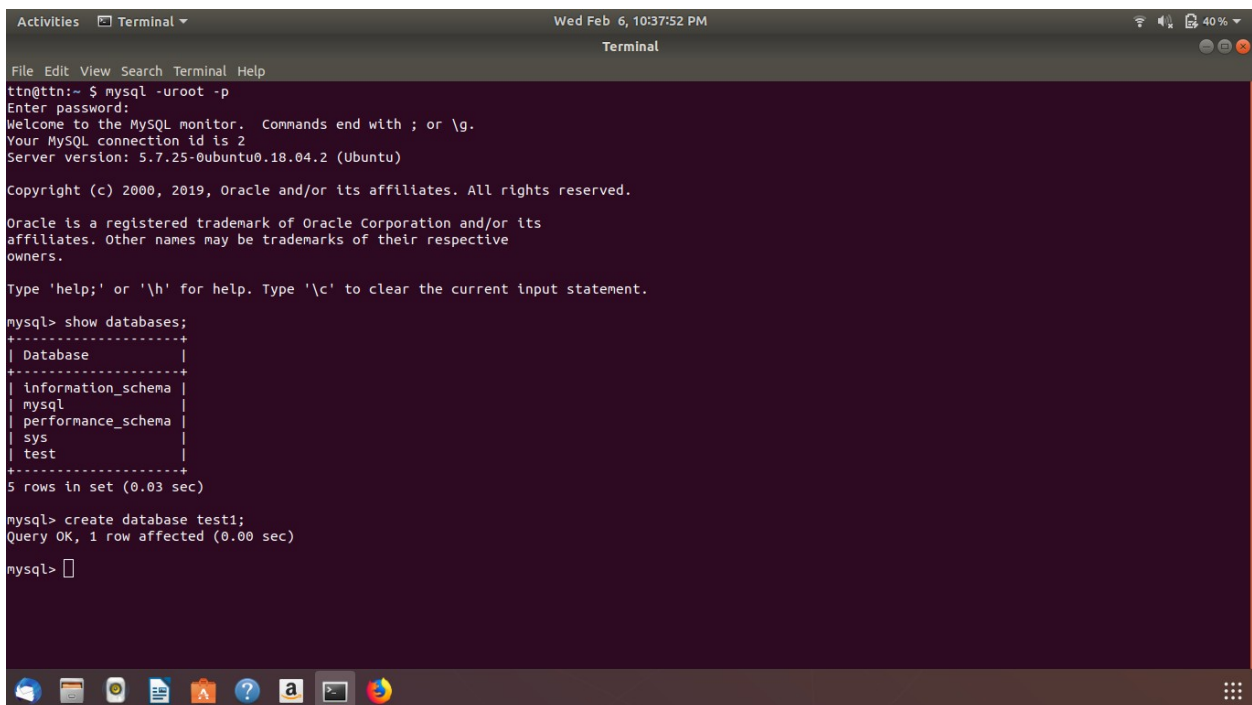Q6.Find the all sales person details along with order details

Q7.Create index

Q8.How to show index on a table

Q9.Find the order number, sale person name, along with the customer to whom that order belongs to

ANSWERS

Q1.Create Database

Q2.Design Schema

```
                                                    Terminal                                              ⊖ ⊡ ⊗
 File Edit View Search Terminal Help
mysql>
mysql> desc customer;
+-----------+----------+------+-----+---------+-------+
| Field     | Type     | Null | Key | Default | Extra |
+-----------+----------+------+-----+---------+-------+
| c_id      | int(11)  | NO   | PRI | NULL    |       |
| c_name    | char(10) | YES  |     | NULL    |       |
| s_city    | char(10) | YES  |     | NULL    |       |
| salesm_id | int(11)  | YES  | MUL | NULL    |       |
+-----------+----------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> desc order;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use n
ear 'order' at line 1
mysql> desc odr;
+--------------+----------+------+-----+---------+-------+
| Field        | Type     | Null | Key | Default | Extra |
+--------------+----------+------+-----+---------+-------+
| o_id         | int(11)  | NO   | PRI | NULL    |       |
| purchase_amnt| int(11)  | YES  |     | NULL    |       |
| salesm_id    | int(11)  | YES  | MUL | NULL    |       |
| custm_id     | int(11)  | YES  | MUL | NULL    |       |
+--------------+----------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> desc salesman;
+---------+----------+------+-----+---------+-------+
| Field   | Type     | Null | Key | Default | Extra |
+---------+----------+------+-----+---------+-------+
| sm_id   | int(11)  | NO   | PRI | NULL    |       |
| sm_name | char(10) | YES  |     | NULL    |       |
| sm_city | char(10) | YES  |     | NULL    |       |
+---------+----------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Q3.Create tables

```
                                                    Terminal                                              ⊖ ⊡ ⊗
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Your MySQL connection id is 2
Server version: 5.7.25-0ubuntu0.18.04.2 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| test               |
+--------------------+
5 rows in set (0.03 sec)

mysql> create database test1;
Query OK, 1 row affected (0.00 sec)

mysql> use test1;
Database changed
mysql>
mysql> create table salesman
    -> (sm_id int,
    -> sm_name char(10),
    -> sm_city char(10)
    -> );
Query OK, 0 rows affected (0.28 sec)
```

```
mysql> create table customer (s_id int , c_name char(10), s_city char(10),salesm_id int, primary key(s_id) , FOREIGN KEY (salesm_id) REFERENCES sales
man (sm_id) );
Query OK, 0 rows affected (0.45 sec)
```

```
mysql>
mysql>
mysql>
mysql> alter table customer  add primary key (s_id);
ERROR 1068 (42000): Multiple primary key defined
mysql> alter table customer rename column "s_id" to "c_id";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use n
ear 'column "s_id" to "c_id"' at line 1
mysql> ALTER TABLE tableName CHANGE `s_id` `c_id` int
    -> ;
ERROR 1146 (42S02): Table 'test1.tableName' doesn't exist
mysql> ALTER TABLE customer  CHANGE `s_id` `c_id` int
    -> ;
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql>  create table order(o_id int primary key , purchase_amnt int,salesm_id int , custm_id int ,  FOREIGN KEY (salesm_id) REFERENCES salesman (sm_id
) , foreign key (custm_id) references customer (c_id ));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use n
ear 'order(o_id int primary key , purchase_amnt int,salesm_id int , custm_id int ,  F' at line 1
mysql>  create table odr(o_id int primary key , purchase_amnt int,salesm_id int , custm_id int ,  FOREIGN KEY (salesm_id) REFERENCES salesman (sm_id)
, foreign key (custm_id) references customer (c_id ));
Query OK, 0 rows affected (0.48 sec)
```

Q4.Insert sample data

```
mysql> insert into salesman values (901,'justin','delhi');
Query OK, 1 row affected (0.05 sec)

mysql> insert into salesman values (902,'kapil','pune');
Query OK, 1 row affected (0.05 sec)

mysql> insert into salesman values (902,'golu','punjab');
ERROR 1062 (23000): Duplicate entry '902' for key 'PRIMARY'
mysql> insert into salesman values (903,'golu','punjab');
Query OK, 1 row affected (0.03 sec)

mysql> insert into salesman values (904,'tushar','bihar');
Query OK, 1 row affected (0.03 sec)

mysql> insert into customer values (991,'nick_j','bihar',901);
Query OK, 1 row affected (0.04 sec)

mysql> insert into customer values (992,'arshad','up',902);
Query OK, 1 row affected (0.04 sec)

mysql> insert into customer values (993,'anshu','hp',903);
Query OK, 1 row affected (0.05 sec)

mysql> insert into customer values (994,'deepanshu','delhi',904);
Query OK, 1 row affected (0.04 sec)

mysql>
```

```
mysql> select * from odr
    -> ;
+------+--------------+-----------+----------+
| o_id | purchase_amnt | salesm_id | custm_id |
+------+--------------+-----------+----------+
|  101 |          450 |       901 |      991 |
|  102 |         4556 |       902 |      991 |
|  103 |          500 |       903 |      992 |
|  104 |         1000 |       904 |      993 |
+------+--------------+-----------+----------+
4 rows in set (0.00 sec)

mysql> select * from customer;
+------+-----------+--------+-----------+
| c_id | c_name    | s_city | salesm_id |
+------+-----------+--------+-----------+
|  991 | nick_j    | bihar  |       901 |
|  992 | arshad    | up     |       902 |
|  993 | anshu     | hp     |       903 |
|  994 | deepanshu | delhi  |       904 |
+------+-----------+--------+-----------+
4 rows in set (0.00 sec)

mysql> select * from salesman;
+-------+---------+---------+
| sm_id | sm_name | sm_city |
+-------+---------+---------+
|   901 | justin  | delhi   |
|   902 | kapil   | pune    |
|   903 | golu    | punjab  |
|   904 | tushar  | bihar   |
+-------+---------+---------+
4 rows in set (0.00 sec)

mysql> 
```

Q5.Find the sales person have multiple orders

```
mysql> SELECT *
    -> FROM salesman
    -> WHERE sm_id IN (
    ->     SELECT DISTINCT salesm_id
    ->     FROM odr a
    ->     WHERE EXISTS (
    ->         SELECT *
    ->         FROM odr b
    ->         WHERE b.salesm_id=a.salesm_id
    ->         AND b.o_id<>a.o_id))
    -> ;
Empty set (0.04 sec)

mysql> 
```

Q6.Find the all sales person details along with order details

Q7.Create index

Q8.How to show index on a table

Terminal

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```
mysql> SHOW INDEX FROM odr;
+-------+------------+----------+--------------+--------------+-----------+-------------+----------+--------+------+------------+---------+---------------+
| Table | Non_unique | Key_name | Seq_in_index | Column_name  | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-------+------------+----------+--------------+--------------+-----------+-------------+----------+--------+------+------------+---------+---------------+
| odr   |          0 | PRIMARY  |            1 | o_id         | A         |           4 |     NULL |   NULL |      | BTREE      |         |               |
| odr   |          1 | salesm_id|            1 | salesm_id    | A         |           4 |     NULL |   NULL | YES  | BTREE      |         |               |
| odr   |          1 | custm_id |            1 | custm_id     | A         |           3 |     NULL |   NULL | YES  | BTREE      |         |               |
| odr   |          1 | index_1  |            1 | purchase_amnt| A         |           5 |     NULL |   NULL | YES  | BTREE      |         |               |
+-------+------------+----------+--------------+--------------+-----------+-------------+----------+--------+------+------------+---------+---------------+
4 rows in set (0.00 sec)

mysql>
```

Q9.Find the order number, sale person name, along with the customer to whom that order belongs to

Terminal

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```
mysql>  select o_id , sm_name , c_name from odr o , salesman s , customer c  where o.custm_id = c.c_id and o.salesmn_id=s.sm_id;
ERROR 1054 (42S22): Unknown column 'o.salesmn_id' in 'where clause'
mysql>  select o_id , sm_name , c_name from odr o , salesman s , customer c  where o.custm_id = c.c_id and o.salesm_id=s.sm_id;
+------+---------+-----------+
| o_id | sm_name | c_name    |
+------+---------+-----------+
|  101 | justin  | nick_j    |
|  102 | kapil   | nick_j    |
|  103 | golu    | arshad    |
|  104 | tushar  | anshu     |
|  105 | justin  | deepanshu |
+------+---------+-----------+
5 rows in set (0.00 sec)

mysql>
```