

Ques 1. Create Database.

```
ttn@ttn: ~  
File Edit View Search Terminal Help  
ttn@ttn:~$ sudo mysql  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 2  
Server version: 5.7.25-0ubuntu0.18.04.2 (Ubuntu)  
  
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affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> create database sales;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> 
```

Ques 2. Design Schema.

```
File Edit View Search Terminal Help  
mysql> desc customer;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| cust_id    | int(10)   | NO   | PRI | NULL    |       |  
| cust_name  | varchar(20)| NO   |     | NULL    |       |  
| cust_add   | varchar(50)| YES  |     | NULL    |       |  
| cust_mobile| int(10)   | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
4 rows in set (0.01 sec)  
  
mysql> desc order_detail  
-> ;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| order_id   | int(10)   | NO   | PRI | NULL    |       |  
| cust_id    | int(10)   | YES  | MUL | NULL    |       |  
| sales_person_id | int(10) | YES  | MUL | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
3 rows in set (0.00 sec)  
  
mysql> desc sales_person;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| sales_person_id | int(10) | NO   | PRI | NULL    |       |  
| sales_person_name | varchar(20) | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
2 rows in set (0.00 sec)  
  
mysql> 
```

Ques 3. Create table.

```
mysql> create table customer(cust_id int(10) not null primary key,cust_name varchar(20) not null, cust_add varchar(50),cust_mobile int(10));
Query OK, 0 rows affected (0.55 sec)

mysql> create table order
```

Ques 4. Insert Sample data.

```
mysql> insert into customer(cust_id,cust_name,cust_add,cust_mobile) values (101,'Latika','Delhi',789456231),(102,'Rohit','Guwahati',875635212),(103,'Kartik','Hyderabad',656345420),(104,'Jatin','Bangalore',967563410),(105,'Kanika','Delhi',798340119);
Query OK, 5 rows affected (0.14 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> select * from customer;
+-----+-----+-----+-----+
| cust_id | cust_name | cust_add | cust_mobile |
+-----+-----+-----+-----+
| 101 | Latika | Delhi | 789456231 |
| 102 | Rohit | Guwahati | 875635212 |
| 103 | Kartik | Hyderabad | 656345420 |
+-----+-----+-----+-----+
```

```
mysql> insert into sales_person(sales_person_id,sales_person_name) values (301,'Rajiv'),(302,'Chandan'),(303,'Ravi');
Query OK, 3 rows affected (0.05 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> insert into order_detail(order_id,cust_id,sales_person_id) values (201,101,301),(202,103,301),(203,101,302),(204,102,303),(205,104,303),(206,103,301);
Query OK, 6 rows affected (0.17 sec)
Records: 6 Duplicates: 0 Warnings: 0

mysql>
```

Ques 5. Find the sales person have multiple orders.

```
Wed 22:09
ttn@ttn: ~

File Edit View Search Terminal Tabs Help

ttn@ttn: ~/abc x ttn@ttn: ~ x

r_detail.sales_person_id<sales_person.sales_person_id;
+-----+
| count(order_id) |
+-----+
| 7 |
+-----+
1 row in set (0.00 sec)

mysql> select sales_person_id,sales_person_name
-> from sales_person
-> where sales_person_id in
-> (select sales_person_id from order_detail
-> group by sales_person_id
-> having count(cust_id)>1
-> );
+-----+-----+
| sales_person_id | sales_person_name |
+-----+-----+
| 301 | Rajiv |
| 303 | Ravi |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Ques 6. Find the all sales person details along with order details.

```
mysql>
mysql> select u1.order_id,u2.sales_person_id,u2.sales_person_name from order_det
ail u1 inner join sales_person u2 on u1.sales_person_id=u2.sales_person_id;
+-----+-----+-----+
| order_id | sales_person_id | sales_person_name |
+-----+-----+-----+
| 201 | 301 | Rajiv |
| 202 | 301 | Rajiv |
| 206 | 301 | Rajiv |
| 203 | 302 | Chandan |
| 204 | 303 | Ravi |
| 205 | 303 | Ravi |
+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```

Ques 7. Create index.

```
mysql> alter table customer add index cust_id_index(cust_id);
Query OK, 0 rows affected (0.39 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from customer;
```

Ques 8. How to show index on a table.

```
mysql> alter table customer add index cust_id_index(cust_id);
Query OK, 0 rows affected (0.39 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from customer;
+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation |
| Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+
| customer | 0 | PRIMARY | 1 | cust_id | A |
| 5 | NULL | NULL | | BTREE | |
| customer | 1 | cust_id_index | 1 | cust_id | A |
| 5 | NULL | NULL | | BTREE | |
```

Ques 9. Find the order number, sale person name, along with the customer to whom that order belongs to.

```
ttn@ttn: ~  
File Edit View Search Terminal Tabs Help  
ttn@ttn: ~/abc x ttn@ttn: ~ x  
+-----+  
| sales_person_id | sales_person_name |  
+-----+  
| 301 | Rajiv |  
| 303 | Ravi |  
+-----+  
2 rows in set (0.00 sec)  
  
mysql> select cust_name,order_id,sales_person_name from customer x left join  
-> order_detail y on x.cust_id=y.cust_id left join sales_person z  
-> on z.sales_person_id=y.sales_person_id;  
+-----+  
| cust_name | order_id | sales_person_name |  
+-----+  
| Latika | 201 | Rajiv |  
| Kartik | 202 | Rajiv |  
| Latika | 203 | Chandan |  
| Rohit | 204 | Ravi |  
| Jatin | 205 | Ravi |  
| Kartik | 206 | Rajiv |  
| Kanika | NULL | NULL |  
+-----+  
7 rows in set (0.00 sec)  
  
mysql> 
```