

1. Create Databases

```
mysql> create database website
-> ;
Query OK, 1 row affected (0.00 sec)

mysql> show databases
-> ;
+-----+
| Database |
+-----+
| information_schema |
| SITE |
| mysql |
| performance_schema |
| sys |
| website |
+-----+
6 rows in set (0.00 sec)

mysql> use website
Database changed
```

Q2. Design Schema

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6 rows in set (0.01 sec)

mysql> use SITE
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed

mysql> describe sales_person;

| Field | Type | Null | Key | Default | Extra |
|-------|-------------|------|-----|---------|-------|
| s_id | int(11) | NO | PRI | NULL | |
| name | varchar(20) | YES | | NULL | |

2 rows in set (0.01 sec)

mysql> describe orders;

| Field | Type | Null | Key | Default | Extra |
|-------|-------------|------|-----|---------|----------------|
| o_id | int(11) | NO | PRI | NULL | auto_increment |
| name | varchar(40) | YES | | NULL | |
| s_id | int(11) | YES | MUL | NULL | |
| c_id | int(11) | YES | MUL | NULL | |

4 rows in set (0.00 sec)

mysql> describe customer;

| Field | Type | Null | Key | Default | Extra |
|-------|-------------|------|-----|---------|----------------|
| c_id | int(11) | NO | PRI | NULL | auto_increment |
| name | varchar(40) | YES | | NULL | |

2 rows in set (0.00 sec)

mysql>

Q3. Create Table

```
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mysql> create table customer(c_id int NOT NULL PRIMARY KEY AUTO_INCREMENT, name varchar(30) NOT NULL);
Query OK, 0 rows affected (0.04 sec)

mysql> create table orders(o_id int NOT NULL PRIMARY KEY AUTO_INCREMENT, name varchar(30) NOT NULL);
Query OK, 0 rows affected (0.04 sec)

mysql> create table sales_person(s_id int NOT NULL PRIMARY KEY AUTO_INCREMENT, name varchar(30) NOT NULL);
Query OK, 0 rows affected (0.03 sec)

mysql> ALTER TABLE orders Add c_id int, s_id int;
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 near 's_id int' at line 1
mysql> ALTER TABLE orders Add c_id int;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE orders Add s_id int;
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE orders Add FOREIGN KEY (c_id) REFERENCES customer(c_id);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE orders Add FOREIGN KEY (s_id) REFERENCES sales_person(s_id);
Query OK, 0 rows affected (0.08 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> show tables;
+-----+
| Tables_in_website |
+-----+
| customer           |
| orders             |
| sales_person       |
+-----+
3 rows in set (0.00 sec)
```

Q4. Insert sample data

```
mysql> insert into customer(name)values("jva");
Query OK, 1 row affected (0.00 sec)

mysql> select * from customer;
+-----+-----+
| c_id | name  |
+-----+-----+
| 1    | sandeep |
| 2    | pradeep |
| 3    | shreya  |
| 4    | jay     |
| 5    | jva     |
+-----+-----+
5 rows in set (0.00 sec)
```

Q5. Find the sales person have multiple orders.

```
Activities Terminal Wed 17:28
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Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from orders;
+-----+-----+-----+-----+
| o_id | name  | s_id | c_id |
+-----+-----+-----+-----+
| 1    | shoes | 2    | 1    |
| 2    | bag   | 2    | 1    |
| 3    | laptops | 1    | 2    |
| 4    | mobiles | 1    | 1    |
| 5    | shoes | 1    | 2    |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from sales_person;
+-----+-----+
| s_id | name  |
+-----+-----+
| 1    | sandeep |
| 2    | Shreya |
| 3    | TEjas |
| 4    | Vinay |
+-----+-----+
4 rows in set (0.00 sec)

mysql> select name from sales_person where (select count(*) from orders where sales_person.s_id=orders.s_id > 1;
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 near '' at line 1
mysql> select name from sales_person where (select count(*) from orders where sales_person.s_id=orders.s_id )> 1;
+-----+
| name  |
+-----+
| sandeep |
| Shreya |
+-----+
2 rows in set (0.00 sec)

mysql>
```

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

```
mysql> select * from sales_person right join orders on sales_person.s_id=orders.s_id;
+-----+-----+-----+-----+-----+-----+
| s_id | name  | o_id | name  | s_id | c_id |
+-----+-----+-----+-----+-----+-----+
| 1    | sandeep | 3    | laptops | 1    | 2    |
| 1    | sandeep | 4    | mobiles | 1    | 1    |
| 1    | sandeep | 5    | shoes   | 1    | 2    |
| 2    | Shreya | 1    | shoes   | 2    | 1    |
| 2    | Shreya | 2    | bag     | 2    | 1    |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

Q7. Create index

```
mysql> create index index2 on orders(o_id,s_id);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

Q8. How to show index on a table.

```

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Terminal
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2 | TEjas | 1 |
4 | TEjas | 1 |
3 | TEjas | 2 |
5 | TEjas | 2 |
1 | Vinay | 1 |
2 | Vinay | 1 |
4 | Vinay | 1 |
3 | Vinay | 2 |
5 | Vinay | 2 |
+-----+
20 rows in set (0.00 sec)

mysql> create index index2 on orders(o_id,s_id);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> show index from orders;
+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+
| orders | 0 | PRIMARY | 1 | o_id | A | 5 | NULL | NULL | | BTREE | | |
| orders | 1 | s_id | 1 | s_id | A | 2 | NULL | NULL | YES | BTREE | | |
| orders | 1 | c_id | 1 | c_id | A | 3 | NULL | NULL | YES | BTREE | | |
| orders | 1 | index2 | 1 | o_id | A | 5 | NULL | NULL | | BTREE | | |
| orders | 1 | index2 | 2 | s_id | A | 5 | NULL | NULL | YES | BTREE | | |
+-----+
5 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

```

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Terminal
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+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+
| orders | 0 | PRIMARY | 1 | o_id | A | 5 | NULL | NULL | | BTREE | | |
| orders | 1 | s_id | 1 | s_id | A | 2 | NULL | NULL | YES | BTREE | | |
| orders | 1 | c_id | 1 | c_id | A | 3 | NULL | NULL | YES | BTREE | | |
| orders | 1 | index2 | 1 | o_id | A | 5 | NULL | NULL | | BTREE | | |
| orders | 1 | index2 | 2 | s_id | A | 5 | NULL | NULL | YES | BTREE | | |
+-----+
5 rows in set (0.00 sec)

mysql> select o.o_id as order_id, c.name as customername, s.name as SalespersonName from sales sales_person s, customer c, orders o where s.s_id=o.s_id and c.c_id=o.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 near 's, customer c, orders o where s.s_id=o.s_id and c.c_id=o.c_id' at line 1
mysql> select o.o_id as order_id, c.name as customername, s.name as SalespersonName from sales_person s, customer c, orders o where s.s_id=o.s_id and c.c_id=o.c_id;
+-----+
| order_id | customername | SalespersonName |
+-----+
| 1 | sandeep | Shreya |
| 2 | sandeep | Shreya |
| 3 | pradeep | sandeep |
| 4 | sandeep | sandeep |
| 5 | pradeep | sandeep |
+-----+
5 rows in set (0.00 sec)

mysql>

```