

Assignment -3

1. Create Database

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

```
mysql> show databases;
```

Database
information_schema
db_abhi
mysql
orderprocessing
performance_schema
sys

```
6 rows in set (0.01 sec)
```

```
mysql> █
```

2. Design Schema. & 3. Create tables.

```
mysql> create table sales(  
  -> id bigint(20) not null auto_increment,  
  -> name varchar(60),  
  -> primary key(id)  
  -> );
```

```
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> desc sales;
```

Field	Type	Null	Key	Default	Extra
id	bigint(20)	NO	PRI	NULL	auto_increment
name	varchar(60)	YES		NULL	

```
2 rows in set (0.00 sec)
```

```
mysql> create table customer( id bigint(20) not null auto_increment, cname varchar(60) not null, primary key(id) );  
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> desc customer;
```

Field	Type	Null	Key	Default	Extra
id	bigint(20)	NO	PRI	NULL	auto_increment
cname	varchar(60)	NO		NULL	

```
2 rows in set (0.00 sec)
```

```
mysql> █
```

```
mysql> create table orders(
->     o_id bigint(20) not null auto_increment,
->     quantity int not null,
->     c_id bigint(20) not null,
->     s_id bigint(20) not null,
->     primary key(o_id),
->     foreign key(c_id) references customer(id),
->     foreign key(s_id) references sales(id)
-> );
Query OK, 0 rows affected (0.05 sec)

mysql> desc orders;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| o_id       | bigint(20)    | NO   | PRI | NULL    | auto_increment |
| quantity   | int(11)       | NO   |     | NULL    |                |
| c_id       | bigint(20)    | NO   | MUL | NULL    |                |
| s_id       | bigint(20)    | NO   | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql>
```

4. Insert sample data.

```
mysql> insert into sales(name) values ("S1");
Query OK, 1 row affected (0.00 sec)

mysql> insert into sales(name) values ("S2");
Query OK, 1 row affected (0.00 sec)

mysql> insert into sales(name) values ("S3");
Query OK, 1 row affected (0.00 sec)

mysql> insert into sales(name) values ("S4");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(cname) values ("C1");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(cname) values ("C2");
Query OK, 1 row affected (0.00 sec)

mysql> insert into customer(cname) values ("C3");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(cname) values ("C4");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer(cname) values ("C5");
Query OK, 1 row affected (0.00 sec)

mysql> insert into customer(cname) values ("C6");
Query OK, 1 row affected (0.01 sec)
```

```

mysql> insert into orders(quantity,c_id,s_id) values (3,1,4);
Query OK, 1 row affected (0.01 sec)

mysql> insert into orders(quantity,c_id,s_id) values (2,1,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (5,2,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into orders(quantity,c_id,s_id) values (7,4,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (10,5,3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (1,3,1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into orders(quantity,c_id,s_id) values (1,3,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (2,6,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (5,3,4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (7,6,2);
Query OK, 1 row affected (0.00 sec)

mysql> insert into orders(quantity,c_id,s_id) values (1,1,1);
Query OK, 1 row affected (0.00 sec)

```

```

mysql> select * from sales;
+----+-----+
| id | name |
+----+-----+
| 1  | S1   |
| 2  | S2   |
| 3  | S3   |
| 4  | S4   |
+----+-----+
4 rows in set (0.00 sec)

mysql> select * from customer;
+----+-----+
| id | cname |
+----+-----+
| 1  | C1    |
| 2  | C2    |
| 3  | C3    |
| 4  | C4    |
| 5  | C5    |
| 6  | C6    |
+----+-----+
6 rows in set (0.00 sec)

```

```
mysql> select * from orders;
+-----+-----+-----+-----+
| o_id | quantity | c_id | s_id |
+-----+-----+-----+-----+
| 1 | 3 | 1 | 4 |
| 2 | 2 | 1 | 2 |
| 3 | 5 | 2 | 1 |
| 4 | 7 | 4 | 3 |
| 5 | 10 | 5 | 3 |
| 6 | 1 | 3 | 1 |
| 7 | 1 | 3 | 2 |
| 8 | 2 | 6 | 4 |
| 9 | 5 | 3 | 4 |
| 10 | 7 | 6 | 2 |
| 11 | 1 | 1 | 1 |
+-----+-----+-----+-----+
11 rows in set (0.00 sec)

mysql> 
```

5. Find the sales person have multiple orders.

```
mysql> select name from sales s where (select count(*) from orders where s.id = orders.s_id)>1;
+-----+
| name |
+-----+
| S1 |
| S2 |
| S3 |
| S4 |
+-----+
4 rows in set (0.00 sec)

mysql> 
```

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

```
mysql> select * from sales s right join orders ON s.id = orders.s_id;
+-----+-----+-----+-----+-----+-----+
| id    | name | o_id | quantity | c_id | s_id |
+-----+-----+-----+-----+-----+-----+
| 1     | S1   | 3    | 5         | 2    | 1    |
| 1     | S1   | 6    | 1         | 3    | 1    |
| 1     | S1   | 11   | 1         | 1    | 1    |
| 2     | S2   | 2    | 2         | 1    | 2    |
| 2     | S2   | 7    | 1         | 3    | 2    |
| 2     | S2   | 10   | 7         | 6    | 2    |
| 3     | S3   | 4    | 7         | 4    | 3    |
| 3     | S3   | 5    | 10        | 5    | 3    |
| 4     | S4   | 1    | 3         | 1    | 4    |
| 4     | S4   | 8    | 2         | 6    | 4    |
| 4     | S4   | 9    | 5         | 3    | 4    |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.00 sec)

mysql>
```

7. Create index

```
mysql> alter table customer add index ccid(id);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql>
```

8. How to show index on a table.

```
mysql> show indexes from customer;
```

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment
customer	0	PRIMARY	1	id	A	6		NULL	NULL	BTREE	
customer	1	ccid	1	id	A	6		NULL	NULL	BTREE	

```
2 rows in set (0.01 sec)
```

```
mysql>
```

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

```
mysql> select orders.o_id,sales.name,orders.c_id from sales right join orders on sales.id = orders.s_id;
+-----+-----+-----+
| o_id | name | c_id |
+-----+-----+-----+
| 3 | S1 | 2 |
| 6 | S1 | 3 |
| 11 | S1 | 1 |
| 2 | S2 | 1 |
| 7 | S2 | 3 |
| 10 | S2 | 6 |
| 4 | S3 | 4 |
| 5 | S3 | 5 |
| 1 | S4 | 1 |
| 8 | S4 | 6 |
| 9 | S4 | 3 |
+-----+-----+-----+
11 rows in set (0.01 sec)

mysql>
```