

## Sol 1.

```
mysql> create database assign3;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| assign3 |
| health |
| mysql |
| performance_schema |
| sys |
| user |
+-----+
7 rows in set (0.00 sec)
```

## Sol 2.

```
mysql> show tables;
+-----+
| Tables_in_assign3 |
+-----+
| Orders |
| customer |
| product |
| seller |
| student |
+-----+
5 rows in set (0.00 sec)

mysql>
```

```
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Terminal
File Edit View Search Terminal Tabs Help
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mysql> desc customer;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| cid | int(11) | NO | PRI | NULL | |
| cname | text | YES | | NULL | |
| cphone | varchar(40) | YES | | NULL | |
+-----+
3 rows in set (0.00 sec)

mysql> desc Orders;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| oid | int(11) | NO | PRI | NULL | |
| cid | int(11) | YES | MUL | NULL | |
+-----+
2 rows in set (0.01 sec)

mysql> desc product;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| pid | int(11) | NO | PRI | NULL | |
| pname | varchar(40) | YES | | NULL | |
+-----+
2 rows in set (0.00 sec)

mysql> desc seller;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sid | int(11) | NO | PRI | NULL | |
| sname | varchar(40) | YES | | NULL | |
| quantity | int(11) | YES | | NULL | |
| pid | int(11) | YES | MUL | NULL | |
| oid | int(11) | YES | MUL | NULL | |
+-----+
```

### Sol 3.

```
mysql> use assign3;
Database changed
mysql> create table student(sid int primary key auto_increment, name varchar(40),age int);
Query OK, 0 rows affected (0.03 sec)

mysql> desc student;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| sid   | int(11)       | NO   | PRI | NULL    | auto_increment |
| name  | varchar(40)   | YES  |     | NULL    |                |
| age   | int(11)       | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

### Sol 4.

```
mysql> insert into student(name,age) values('A',22);
Query OK, 1 row affected (0.01 sec)

mysql> insert into student(name,age) values('B',23);
Query OK, 1 row affected (0.01 sec)

mysql> select * from student;
+-----+-----+-----+
| sid | name | age |
+-----+-----+-----+
| 1   | A    | 22  |
| 2   | B    | 23  |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

### Sol 5.

```
mysql> select * from seller;
+-----+-----+-----+-----+-----+
| sid | sname | quantity | pid | oid |
+-----+-----+-----+-----+-----+
| 1   | selA  | 10       | 4   | 1004 |
| 2   | selB  | 1        | 4   | 1008 |
| 3   | selC  | 5        | 4   | 1009 |
| 4   | selD  | 5        | 2   | 1006 |
| 5   | selE  | 6        | 1   | 1007 |
| 6   | selF  | 1        | 3   | 1007 |
| 7   | selF  | 10       | 4   | 1006 |
| 8   | selD  | 5        | 5   | 1003 |
+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> select sname,count(*) from seller group by sname having count(*)>1;
+-----+-----+
| sname | count(*) |
+-----+-----+
| selD  | 2        |
| selF  | 2        |
+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

**Sol 6.**

```
mysql> select s.sid, s.sname,s.quantity,o.oid from seller s inner join Orders o where s.oid=o.oid;
+----+-----+-----+----+
| sid | sname | quantity | oid |
+----+-----+-----+----+
| 1   | selA  | 10       | 1004 |
| 2   | selB  | 1        | 1008 |
| 3   | selC  | 5        | 1009 |
| 4   | selD  | 5        | 1006 |
| 5   | selE  | 6        | 1007 |
| 6   | selF  | 1        | 1007 |
| 7   | selF  | 10       | 1006 |
| 8   | selD  | 5        | 1003 |
+----+-----+-----+----+
8 rows in set (0.00 sec)

mysql>
```

**Sol 7.**

```
mysql> select * from student;
+-----+-----+
| sid | name | age |
+-----+-----+
| 1 | A | 22 |
| 2 | B | 23 |
+-----+-----+
2 rows in set (0.00 sec)

mysql> alter table student add index index_id(sid);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql>
```

**Sol 8.**

[illegible]

## Sol 9.

```
mysql> select o.oid, c.cname, s.sname from Orders o inner join customer c on(c.cid=o.cid) inner join seller s on (s.oid=o.oid);
```

oid	cname	sname
1003	cusA	selD
1004	cusB	selA
1009	cusD	selC
1006	cusD	selD
1006	cusD	selF
1008	cusE	selB
1007	cusE	selE
1007	cusE	selF

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

```
mysql>
```