

OUTPUT:

1. Create 2 relations with the given schema
2. DOCTOR_last two digits of your roll no
3. Describe the relations after the basic structure is created without foreign keys.

```
Select c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe
```

```
mysql> create database hospital_72;  
Query OK, 1 row affected (0.17 sec)
```

```
mysql> use hospital_72;  
Database changed
```

```
mysql> create table doctor_72(  
-> Doctor_id int(6),  
-> lname varchar(20),  
-> Mobile_no int(11) unique not null,  
-> Dept_id int(4) not null,  
-> primary key(Doctor_id, lname));  
Query OK, 0 rows affected (0.77 sec)
```

```
mysql> create table doctor_72(  
-> ^C  
mysql> create table department_72(  
-> Dept_id int(4) primary key,  
-> Dept_name varchar(20) unique,  
-> Hod_id int(6) not null,  
-> contact_no int(11) unique not null);  
Query OK, 0 rows affected (0.16 sec)
```

```
mysql> desc doctor_72;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| Doctor_id | int(6) | NO | PRI | NULL | |
| lname | varchar(20) | NO | PRI | NULL | |
| Mobile_no | int(11) | NO | UNI | NULL | |
| Dept_id | int(4) | NO | | NULL | |

```
4 rows in set (0.83 sec)
```

```
mysql> desc department_72;
```

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| Dept_id | int(4) | NO | PRI | NULL | |
| Dept_name | varchar(20) | YES | UNI | NULL | |
| Hod_id | int(6) | NO | | NULL | |
| contact_no | int(11) | NO | UNI | NULL | |

```
4 rows in set (0.06 sec)
```

```
mysql> alter table department_72
-> add lname varchar(20) not null;
Query OK, 0 rows affected (0.30 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc department_72;
```

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| Dept_id | int(4) | NO | PRI | NULL | |
| Dept_name | varchar(20) | YES | UNI | NULL | |
| Hod_id | int(6) | NO | | NULL | |
| contact_no | int(11) | NO | UNI | NULL | |
| lname | varchar(20) | NO | | NULL | |

```
5 rows in set (0.02 sec)
```

4. Describe the final schema for both the relations
(In the output include all the statements including the alter that are used to obtain the final schema)

```
mysql> alter table department_72
-> add constraint foreign key(Hod_id) references doctor_72(Doctor_id);
Query OK, 0 rows affected (0.20 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table department_72
-> add constraint foreign key(lname) references doctor_72(lname);
Query OK, 0 rows affected (0.14 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table doctor_72
-> add foreign key(Dept_id) references department_72(Dept_id);
Query OK, 0 rows affected (0.14 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> desc department_72;
```

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| Dept_id | int(4) | NO | PRI | NULL | |
| Dept_name | varchar(20) | YES | UNI | NULL | |
| Hod_id | int(6) | NO | MUL | NULL | |
| contact_no | int(11) | NO | UNI | NULL | |
| lname | varchar(20) | NO | MUL | NULL | |

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

```
mysql> desc doctor_72;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| Doctor_id | int(6) | NO | PRI | NULL | |
| lname | varchar(20) | NO | PRI | NULL | |
| Mobile_no | int(11) | NO | UNI | NULL | |
| Dept_id | int(4) | NO | MUL | NULL | |

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