```
mysql> CREATE DATABASE HOSPITAL;
Query OK, 1 row affected (0.23 sec)

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| HOSPITAL           |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)

mysql> USE HOSPITAL;
Database changed
```

```
mysql> CREATE TABLE DEPARTMENTS(
    -> DEPARTMENT_ID INT           NOT NULL,
    -> DEPARTMENT_NAME VARCHAR(40) NOT NULL,
    -> PRIMARY KEY(DEPARTMENT_ID)
    -> );
Query OK, 0 rows affected (1.50 sec)

mysql> CREATE TABLE DOCTORS(
    -> DOCTOR_ID INT               NOT NULL,
    -> DOCTOR_NAME VARCHAR(40)     NOT NULL,
    -> DOCTOR_ADDRESS VARCHAR(40),
    -> DOCTOR_SALARY INT           NOT NULL,
    -> DEPARTMENT_ID INT           NOT NULL,
    -> PRIMARY KEY (DOCTOR_ID),
    -> FOREIGN KEY (DEPARTMENT_ID) REFERENCES DEPARTMENTS (DEPARTMENT_ID)
    -> );
Query OK, 0 rows affected (1.59 sec)
```

```
mysql> CREATE TABLE PATIENTS(
    -> PATIENT_ID INT              NOT NULL,
    -> PATIENT_NAME VARCHAR(40)  NOT NULL,
    -> PATIENT_CITY VARCHAR(40),
    -> PATIENT_CONTACT CHAR(10)  UNIQUE,
    -> ADMIT_DATE DATE            NOT NULL,
    -> DISCHARGE_DATE DATE,
    -> DOCTOR_ID INT              NOT NULL,
    -> PRIMARY KEY(PATIENT_ID),
    -> FOREIGN KEY (DOCTOR_ID) REFERENCES DOCTORS (DOCTOR_ID)
    -> );
Query OK, 0 rows affected (2.06 sec)
```

```
mysql> SELECT * FROM DEPARTMENTS;
+---------------+-----------------+
| DEPARTMENT_ID | DEPARTMENT_NAME |
+---------------+-----------------+
|             1 | CARDIOLOGY      |
|             2 | PHYSIOTHERAPY   |
|             3 | MATERNITY       |
+---------------+-----------------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM DOCTORS;
+-----------+-------------+----------------+---------------+---------------+
| DOCTOR_ID | DOCTOR_NAME | DOCTOR_ADDRESS | DOCTOR_SALARY | DEPARTMENT_ID |
+-----------+-------------+----------------+---------------+---------------+
|      1001 | YATIN       | DELHI          |        100000 |             2 |
|      1002 | VAIBHAV     | NULL           |         50000 |             3 |
|      1003 | HRISHABH    | MUMBAI         |        150000 |             2 |
|      1004 | SHIKHAR     | NULL           |        200000 |             1 |
|      1005 | DIVYANSHU   | BANGALORE      |         75000 |             3 |
+-----------+-------------+----------------+---------------+---------------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM PATIENTS;
+------------+--------------+--------------+-----------------+------------+----------------+-----------+
| PATIENT_ID | PATIENT_NAME | PATIENT_CITY | PATIENT_CONTACT | ADMIT_DATE | DISCHARGE_DATE | DOCTOR_ID |
+------------+--------------+--------------+-----------------+------------+----------------+-----------+
|       2001 | VIKAS        | DELHI        | NULL            | 2020-10-22 | 2020-10-23     |      1001 |
|       2002 | SUMERA       | NULL         | 959999990       | 2020-10-21 | 2020-10-22     |      1004 |
|       2003 | SUMERA       | NULL         | 959999923       | 2020-10-21 | 2020-10-22     |      1002 |
|       2004 | SIDRA        | GURGAON      | NULL            | 2020-10-19 | NULL           |      1003 |
|       2005 | ASJAD        | NULL         | 999099981       | 2020-10-18 | 2020-10-20     |      1001 |
|       2006 | ASHUTOSH     | NULL         | 999989691       | 2020-10-17 | 2020-10-18     |      1002 |
|       2007 | PRANJAL      | GHAZIABAD    | NULL            | 2020-10-16 | NULL           |      1003 |
|       2008 | HIMANSHU     | NULL         | 999987991       | 2020-10-15 | 2020-10-16     |      1004 |
|       2009 | RISHABH      | AGRA         | NULL            | 2020-10-14 | 2020-10-15     |      1005 |
|       2010 | SANKET       | BIHAR        | NULL            | 2020-10-13 | NULL           |      1001 |
|       2011 | BHAVYA       | NULL         | 999989951       | 2020-10-12 | 2020-10-13     |      1002 |
+------------+--------------+--------------+-----------------+------------+----------------+-----------+
```

```
mysql> SELECT T.DOCTOR_ID, T.DOCTOR_NAME, T.DEPARTMENT_NAME, PATIENT_NAME
    -> FROM (SELECT D.DOCTOR_ID, D.DOCTOR_NAME, DP.DEPARTMENT_NAME
    -> FROM DOCTORS AS D
    -> INNER JOIN DEPARTMENTS AS DP
    -> ON D.DEPARTMENT_ID = DP.DEPARTMENT_ID)
    -> AS T
    -> INNER JOIN PATIENTS
    -> ON T.DOCTOR_ID = PATIENTS.DOCTOR_ID;
+-----------+-------------+-----------------+--------------+
| DOCTOR_ID | DOCTOR_NAME | DEPARTMENT_NAME | PATIENT_NAME |
+-----------+-------------+-----------------+--------------+
|      1004 | SHIKHAR     | CARDIOLOGY      | SUMERA       |
|      1004 | SHIKHAR     | CARDIOLOGY      | HIMANSHU     |
|      1001 | YATIN       | PHYSIOTHERAPY   | VIKAS        |
|      1001 | YATIN       | PHYSIOTHERAPY   | ASJAD        |
|      1001 | YATIN       | PHYSIOTHERAPY   | SANKET       |
|      1003 | HRISHABH    | PHYSIOTHERAPY   | SIDRA        |
|      1003 | HRISHABH    | PHYSIOTHERAPY   | PRANJAL      |
|      1002 | VAIBHAV     | MATERNITY       | SUMERA       |
|      1002 | VAIBHAV     | MATERNITY       | ASHUTOSH     |
|      1002 | VAIBHAV     | MATERNITY       | BHAVYA       |
|      1005 | DIVYANSHU   | MATERNITY       | RISHABH      |
+-----------+-------------+-----------------+--------------+
```

```
mysql> SELECT DISCHARGE_DATE, COUNT(PATIENT_ID)
    -> FROM PATIENTS
    -> GROUP BY DISCHARGE_DATE
    -> HAVING DATE(DISCHARGE_DATE) BETWEEN '2020-10-16' AND '2020-10-22';
+----------------+-------------------+
| DISCHARGE_DATE | COUNT(PATIENT_ID) |
+----------------+-------------------+
| 2020-10-22     |                 2 |
| 2020-10-20     |                 1 |
| 2020-10-18     |                 1 |
| 2020-10-16     |                 1 |
+----------------+-------------------+
```