

Create the following tables for HMS(Hospital Management System):

The Doctor_master table contains information about doctors in the hospital.

DOCTOR_MASTER(doctor_id,doctor_name,dept)

Column Name	Data type & Data size	Description
doctor_id	Varchar(15)	doctorid must be unique and not null
doctor_name	Varchar2(15)	Doctor name should be not null
Dept	Varchar2(15)	Dept name should be not null

Sample Data:

doctor_id	doctor_name	dept
D0001	Ram	ENT
D0002	Rajan	ENT
D0003	Smita	Eye
D0004	Bhavan	Surgery
D0005	Sheela	Surgery
D0006	Nethra	Surgery

The room_master table contains information about room availability in the hospital.

ROOM_MASTER(room_no, room_type, status)

Column Name	Data type & Data size	Description
room_no	Varchar(15)	roomno must be unique and not null
room_type	Varchar2(15)	room type name should be not null
status	Varchar2(15)	status name should be not null

Sample Data:

room_no	room_type	status
R0001	AC	occupied
R0002	Suite	vacant
R0003	NonAC	vacant
R0004	NonAC	occupied
R0005	AC	vacant
R0006	AC	occupied

The patient_master table contains information about patients in the hospital.

PATIENT_MASTER(pid, name,age,weight,gender,address,phoneno,disease,doctorid)

Column Name	Data type & Data size	Description
pid	Varchar(15)	pid must be unique and not null
name	Varchar2(15)	name should be not null
age	number(15)	age should be not null
Weight	number(15)	weight should be not null
Gender	Varchar(10)	gender should be not null
Address	Varchar(50)	address should be not null
phoneno	varchar(10)	phoneno should be not null
Disease	Varchar(50)	disease should be not null
Doctor_id	Varchar(5)	Must be an existing doctor

Sample Data:

pid	name	age	weight	gender	address	phoneno	disease	Doctor_id
P0001	Gita	35	65	F	Chennai	9867145678	Eye Infection	D0003
P0002	Ashish	40	70	M	Delhi	9845675678	Asthma	D0003
P0003	Radha	25	60	F	Chennai	9867166678	Pain in	D0005

							heart	
P0004	Chandra	28	55	F	Bangalore	9978675567	Asthma	D0001
P0005	Goyal	42	65	M	Delhi	8967533223	Pain in Stomach	D0004

The room_allocation table contains information about the allocation of room to the patients in the hospital.

ROOM_ALLOCATION(room_no, pid, admission_date, release_date)

Column Name	Data type & Data size	Description
room_no	Varchar(15)	Must be an existing rooms
pid	Varchar2(15)	Must be an existing patients
admission_date	date	Admission date should be not null
Release_date	date	

Sample Data:

room_no	pid	admission_date	Release_date
R0001	P0001	15-oct-16	26-oct-16
R0002	P0002	15-nov-16	26-nov-16
R0002	P0003	01-dec-16	30-dec-16
R0004	P0001	01-jan-17	30-jan-17

NOTE:

You are supposed to fill in the given records in DOCTOR_MASTER, ROOM_MASTER, PATIENT_MASTER and ROOM_ALLOCATION tables following these rules:

1. Identify the primary key and foreign key (if applicable) in each table.
2. Take care of the constraints and the relationships among the tables.

QUERIES

Query #1: Display the patients who were admitted in the month of january.

Query #2: Display the female patient who is not suffering from ashma

Query #3: Count the number of male and female patients.

Query #4: Display the patient_id,patient_name, doctor_id, doctor_name, room_no, room_type and admission_date.

Query #5: Display the room_no which was never allocated to any patient.

Query #6: Display the room_no, room_type which are allocated more than once.

```
create table DOCTOR_MASTER(  
  doctor_id varchar(15) primary key,  
  doctor_name varchar(15) not null,  
  Dept varchar(15) not null,  
  unique(doctor_name)  
);  
  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0001','Ram','ENT');  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0002','Rajan','ENT');  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0003','Smita','Eye');  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0004','Bhavan','Surgery');  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0005','Sheela','Sugery');  
insert into DOCTOR_MASTER(doctor_id,doctor_name,dept) values('D0006','Nethra','Surgery');
```

```
SELECT* from DOCTOR_MASTER;
```

```
create table ROOM_MASTER(  

```

```
        room_no varchar(15) primary key,  
        room_type varchar(15) not null,  
        status varchar(15) not null,  
        unique(room_no)  
    );  
  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0001','AC','occupied');  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0002','Suite','vacant');  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0003','NonAC','vacant');  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0004','NonAC','occupied');  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0005','AC','vacant');  
insert into ROOM_MASTER(room_no,room_type,status) VALUES ('R0006','AC','occupied');
```

```
SELECT* from ROOM_MASTER;
```

```
create table PATIENT_MASTER (  
    pid varchar(15) not null,  
    name varchar(15) not null,  
    age varchar(15) not null,  
    Weight varchar(15) not null,  
    Gender varchar(10) not null,  
    Address varchar(10) not null,  
    phoneno varchar(10) not null,  
    Disease varchar(50) not null,  
    doctor_id varchar(5) REFERENCES DOCTOR_MASTER(doctor_id)  
);
```

```
insert into PATIENT_MASTER VALUES('P0001','Gita',35,65,'F','Chennai',9867145678,'Eye Infection','D0003');
```

```
insert into PATIENT_MASTER  
VALUES('P0002','Ashish',40,70,'M','Delhi',9845675678,'Asthma','D0003');
```

```
insert into PATIENT_MASTER VALUES('P0003','Radha',25,60,'F','Chennai',9867166678,'Pain in heart','D0005');
```

```
insert into PATIENT_MASTER  
VALUES('P0004','Chandra',28,55,'F','Bangalore',9978675567,'Asthma','D0001');
```

```
insert into PATIENT_MASTER VALUES('P0005','Goyal',42,65,'M','Delhi',8967533223,'Pain in Stomach','D0004');
```

```
SELECT * FROM PATIENT_MASTER;
```

```
Create table ROOM_ALLOCATION(  
room_no varchar(15) REFERENCES ROOM_MASTER(room_no),  
pid varchar(15) REFERENCES PATIENT_MASTER(pid),  
admission_date date not null,  
realease_date date  
);
```

```
insert into ROOM_ALLOCATION VALUES('R0001','P0001','2016-10-15','2016-10-26');
```

```
insert into ROOM_ALLOCATION VALUES('R0002','P0002','2016-11-15','2016-11-26');
```

```
insert into ROOM_ALLOCATION VALUES('R0002','P0003','2016-12-16','2016-12-30');
```

```
insert into ROOM_ALLOCATION VALUES('R0004','P0001','2017-01-01','2017-01-30');
```

```
select * from ROOM_ALLOCATION;
```

#1st query

```
select PATIENT_MASTER.name from PATIENT_MASTER inner join ROOM_ALLOCATION on  
PATIENT_MASTER.pid=ROOM_ALLOCATION.pid where admission_date= '2017-01-01';
```

#2nd query

```
select name from PATIENT_MASTER where Gender='F' and Disease!='Asthma';
```

#3rd query

```
select count(*) from PATIENT_MASTER where Gender IN ('M','F') ;
```

#4th query

```
select  
PATIENT_MASTER.pid,PATIENT_MASTER.name, DOCTOR_MASTER.doctor_id,  
ROOM_MASTER.room_no,ROOM_MASTER.room_type,ROOM_ALLOCATION.admission_date  
from PATIENT_MASTER,DOCTOR_MASTER,ROOM_MASTER,ROOM_ALLOCATION where  
PATIENT_MASTER.pid=ROOM_ALLOCATION.pid  
and ROOM_ALLOCATION.room_no=ROOM_MASTER.room_no  
and DOCTOR_MASTER.doctor_id=PATIENT_MASTER.doctor_id;
```

```
select PATIENT_MASTER.pid,PATIENT_MASTER.name,DOCTOR_MASTER.doctor_id,
```

```
ROOM_MASTER.room_no,ROOM_MASTER.room_type,ROOM_ALLOCATION.admission_date
from PATIENT_MASTER inner join DOCTOR_MASTER on
DOCTOR_MASTER.doctor_id=PATIENT_MASTER.doctor_id
inner join ROOM_ALLOCATION on PATIENT_MASTER.pid=ROOM_ALLOCATION.pid
inner join ROOM_MASTER on ROOM_MASTER.room_no=ROOM_ALLOCATION.room_no;
```

#5th query

```
select room_no from ROOM_MASTER where status='vacant';
```

#6th query

```
select room_no,room_type from ROOM_MASTER where status!='vacant';
```


