



Hospital Database Management System

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Team:

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SQL Queries:

1. Retrieve patient id, nurse id, discharge date of a patient which come after a particular date like '2016-05-03'.

Query: `Select * from in_patient where arrival_date >= '2016-05-03';`

```
postgres=# select * from in_patient where arrival_date >= '2016-05-03';
 pid  | nid  | rid  | arrival_date | discharge_date | disease
-----+-----+-----+-----+-----+-----
 pt_4 | emp_9 | 1002 | 2016-06-07   | 2016-07-10     | heart_attack
 pt_4 | emp_9 | 1002 | 2016-07-12   | 2016-08-10     | heart_attack
(2 rows)
```

2. Retrieve name, bill date, tcost, mcost of a particular patient with given patient id like pid='pt_2'.

`Select fname,lname,billdate,mcost,tcost from patient natural join bill where pid='pt_2';`

```
postgres=# select fname,lname,billdate,mcost,tcost from patient natural join bill where pid='pt_2';
 fname | lname | billdate | mcost | tcost
-----+-----+-----+-----+-----
 shivam | nigan | 2015-05-13 | 200.00 | 200.00
(1 row)
```

3. Retrieve name, arrival date, disease, room id, room type of a patient with a particular patient id.

`Select fname,lname,arrival_date,rid,roomtype,disease from in_patient natural join room natural join patient where pid='pt_4';`

```
postgres=# select fname,lname,arrival_date,rid,roomtype,disease from in_patient
        natural join room natural join patient where pid='pt_4';
 fname | lname | arrival_date | rid | roomtype | disease
-----+-----+-----+----+-----+-----
 Dev   | Gorai | 2016-06-07   | 1002 | GENERAL WARD | heart_attack
 Dev   | Gorai | 2016-07-12   | 1002 | GENERAL WARD | heart_attack
(2 rows)
```

4. Retrieve id,name,test name, test cost,test date of a patient

Select pid,fname,lname,tname,tcost,testdate from patient natural join
hadtest natural join test;

```
postgres=# select pid,fname,lname,tname,tcost,testdate from patient natural join hadtest natural join test;
 pid | fname | lname | tname | tcost | testdate
-----+-----+-----+-----+-----+-----
 pt_1 | vikas | sharma | X-RAY | 100.00 | 2015-06-07
 pt_2 | shivam | nigam | ENDOSCOPY | 3000.00 | 2016-06-08
(2 rows)
```

5. Retrieve details of a patient and doctor assigned to that patient.

Select pid,doc_id,fname,mname,lname,email from (select pid,doc_id from
patient natural join doctor) as a,(select
emp_id,fname,mname,lname,email from employee) as b where
a.doc_id=b.emp_id;

```
postgres=# select pid,doc_id,fname,mname,lname,email from
(select pid,doc_id from patient natural join doctor) as a
,(select emp_id,fname,mname,lname,email from employee) as b
where a.doc_id=b.emp_id;
 pid | doc_id | fname | mname | lname | email
-----+-----+-----+-----+-----+-----
 pt_5 | emp_1 | vikas | k | sharma | vikas61999@gmail.com
 pt_1 | emp_1 | vikas | k | sharma | vikas61999@gmail.com
 pt_6 | emp_2 | shivam | k | nigam | shivam@gmail.com
 pt_2 | emp_2 | shivam | k | nigam | shivam@gmail.com
 pt_3 | emp_3 | bhavesh | k | patel | bhavesh69@gmail.com
 pt_4 | emp_4 | Dev | kumar | Gorai | devdk@gmail.com
(6 rows)
```

6. Retrieve details of a patient, doctor assigned to that patient with a particular disease like 'accident'.

Select fname, lname ,doc_id,disease from patient natural join in_patient where disease='accident';

```
postgres=# select fname,lname,doc_id,disease from patient natural join in_patient where disease='accident';
 fname | lname | doc_id | disease
-----+-----+-----+-----
 bhavesh | patel | emp_3 | accident
 sawai | jain | emp_2 | accident
(2 rows)
```

7. Retrieve details of a doctor like their name, qualification etc.

Select fname,mname,lname,qualification from doctor,(select * from employee where emptype='doctor') as b where doctor.doc_id=b.emp_id;

```
postgres=# select fname,mname,lname,qualification from doctor,
(select * from employee where emptype='doctor') as b
where doctor.doc_id=b.emp_id;
 fname | mname | lname | qualification
-----+-----+-----+-----
 vikas | k | sharma | mbbs
 shivam | k | nigam | md
 bhavesh | k | patel | bhms
 Dev | kumar | Gorai | mbbs
(4 rows)
```

8. Retrieve details of a patient and medicine assigned to a particular patient.

Select distinct pid,fname,lname,mid,mname,mcost from patient natural join had_medicine natural join medicine;

```
postgres=# select distinct pid,fname,lname,mid,mname,mcost from patient natural join had_medicine natural join medicine;
 pid | fname | lname | mid | mname | mcost
-----+-----+-----+-----+-----+-----
 pt_1 | vikas | sharma | 4 | GLUCOSE | 200.00
 pt_2 | shivam | nigam | 1 | CROCINE | 10.00
 pt_4 | Dev | Gorai | 4 | GLUCOSE | 200.00
 pt_5 | harsha | shah | 10 | OVEX | 25.00
 pt_2 | shivam | nigam | 2 | ASPIRIN | 8.00
 pt_1 | vikas | sharma | 1 | CROCINE | 10.00
(6 rows)
```

9. Retrieve details of a patient whose age is greater than 18.

Select * from (select fname||' '||lname as name,
Extract(YEAR FROM age('2019-04-23',dob)) as Age
from patient) as e where e.age>=18;

```
postgres=# select * from (select fname||' '||lname as name,
      Extract(YEAR FROM age('2019-04-23',dob)) as Age
      from patient) as e where e.age>=18;
   name   | age
-----+-----
vikas sharma | 19
shivam nigam | 20
bhavesh patel | 19
Dev Gorai   | 19
harsha shah  | 22
sawai jain   | 19
(6 rows)
```

10. Count the number of rooms is currently available.

Select count(available) from room where available=True group by available;

```
postgres=# select count(available) from room where available=True group by available;
 count
-----
      9
(1 row)
```

11. Name of the patients who are admitted yet.

Select fname||' '||lname as name,email from patient natural join
(select pid from in_patient where discharge_date IS NULL) as r;

```
postgres=# select fname||' '||lname as name,email from patient natural join
      (select pid from in_patient where discharge_date IS NULL) as r;
   name   | email
-----+-----
suraj singh | sur@gmail.com
manan singh | hek@gmail.com
priya jha   | dfteftf@gmail.com
Shalini gupta | salini2@gmail.com
(4 rows)
```

12. Name of nurses who are assigned to a particular type of room.

```
select distinct fname||' '||mname||' '||lname as name
from employee natural join (select nid from room natural join
(select * from in_patient natural join nurse) as e where roomtype='VIP
SUITE') as f where employee.emp_id=f.nid;
```

```
postgres=# select distinct fname||' '||mname||' '||lname as name
          from employee natural join (select nid from room natural join
          (select * from in_patient natural join nurse) as e where roomtype='VIP SUITE')
          as f where employee.emp_id=f.nid;
          name
-----
deepika k gupta
neha k gupta
(2 rows)
```