

SQL - FINAL PROJECT

Problem Statement:

In a database there are two tables : Write MYSQL queries for (i) to (vi)

Table : Doctors

DocID	DocName	Department	NoofOpdDays
101	J K Mishra	Ortho	3
102	Mahesh tripathi	ENT	4
103	Ravi Kumar	Neuro	5
104	Mukesh Jain	Physio	3

Table : Patients

PatNo	PatName	Department	DocId
1	Payal	ENT	102
2	Naveen	Ortho	101
3	Rakesh	Neuro	103
4	Atul	Physio	104

- (i) To display PatNo, PatName and corresponding DocName for each patient.
- (ii) To display the list of all doctors whose NoofOpdDays are more than 3
- (iii) To display DocName, Department,PatName and DocId from both the tables where DocID is either 101 or 103
- (iv) To display total no of different departments from Patients table.

Table creation:

```
CREATE TABLE doctors(docid int primary key, docname varchar(20), dept varchar(20), noofopddays int);
CREATE TABLE patients(patno int primary key, patname varchar(20), dept varchar(20), docid int, foreign key (docid) references doctors(docid));

INSERT INTO doctors VALUES (101,'J K Mishra','Ortho',3),(102,'Mahesh Tripathi','ENT',4),(103,'Ravi Kumar','Neuro',5),(104,'Mukesh Jain','Physio',3);
INSERT INTO patients VALUES (1,'Payal','ENT',102),(2,'Naveen','Ortho',101),(3,'Rakesh','Neuro',103),(4,'Atul','Physio',104);
```

1. To display PatNo, PatName and corresponding DocName for each patient:

```
SELECT p.patno,p.patname,d.docname FROM patients p LEFT JOIN doctors d ON p.docid = d.docid;
```

Output:

patno	patname	docname
1	Payal	Mahesh Tripathi
2	Naveen	J K Mishra
3	Rakesh	Ravi Kumar
4	Atul	Mukesh Jain

2. To display the list of all doctors whose No of opd days are more than 3:

```
SELECT docname FROM doctors WHERE noofopddays>3;
```

Output:

docname
Mahesh Tripathi
Ravi Kumar

3. To display docname, department name, docid, and patname from both the tables where docid = 101 or docid = 103:

```
SELECT d.docid,d.docname,d.dept,p.patname FROM doctors d JOIN patients p ON d.docid = p.docid  
WHERE d.docid = 101 OR d.docid = 103;
```

Output:

docid	docname	dept	patname
101	J K Mishra	Ortho	Naveen
103	Ravi Kumar	Neuro	Rakesh

4. To display total number of different departments from the Patients table:

```
SELECT DISTINCT count(dept) AS 'Count of distinct depts' FROM patients;
```

Output:

Count of distinct depts
4