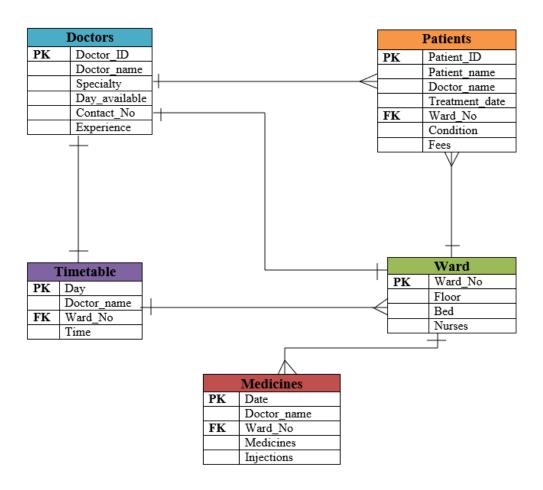
SQL Subquery assignment

Database Schema

PK- Primary Key FK - Foreign Key



Initial queries for database, table creation and inserting values

Create and use database

```
create database subqry;
use subqry;
```

Create Tables

```
CREATE TABLE Doctors(Doctor_ID int,Doctor_name varchar(30),Specialty
varchar(20),Day_Available varchar(20),Contact_No varchar(13),Experience
int);

CREATE TABLE Patients(Patient_ID int,Patient_name varchar(20),Doctor_name
varchar(30),Treatment_date varchar(10),Ward_no int,Condition
varchar(20),Fees int);

CREATE TABLE Timetable(Day varchar(20),Doctor_name varchar(20),Ward_no
int,Time varchar(20));

CREATE TABLE Ward(Ward no int,Floor int,Beds int,Nurses int);
```

```
CREATE TABLE Medicines(Date varchar(10),Doctor_name varchar(30),Ward_no
int,Injections int,Medicines int);
```

Inserting Values

```
INSERT INTO Doctors VALUES(1, 'Dr.Harsh', 'Dietician', 'Monday', '9876543210',5);
INSERT INTO Doctors VALUES(1, 'Dr.Harsh', 'Dietician', 'Monday', '9876543210',5);
INSERT INTO Doctors VALUES(2, 'Dr.Simran', 'Cardiologist', 'Tuesday', '995671866',6);
INSERT INTO Doctors VALUES(3, 'Dr.Abhishek', 'Gynecologist', 'Monday', '8756128765',4);
INSERT INTO Doctors VALUES(4, 'Dr.Tanuja', 'Dietician', 'Tuesday', '9875617286',2);
INSERT INTO Doctors VALUES(1, 'Dr.Vedant', 'Cardiologist', 'Monday', '678195278',10);
INSERT INTO Doctors VALUES(5, 'Dr.Sanika', 'Gynecologist', 'Monday', '9876524516',2);
INSERT INTO Doctors VALUES(6, 'Dr.Nitish', 'Neurologist', 'Saturday', '7651862542',4);
INSERT INTO Doctors VALUES(7, 'Dr.Sanskriti', 'Dietician', 'Tuesday', '9876545678',5);
INSERT INTO Doctors VALUES(8, 'Dr.Pranali', 'Gynecologist', 'Monday', '7689018765',6);
INSERT INTO Doctors VALUES(9, 'Dr.Paavana', 'Dietician', 'Sunday', '6789156278',10);
INSERT INTO Doctors VALUES(10, 'Dr.Devang', 'Cardiologist', 'Monday', '18976254187',10);
INSERT INTO Doctors VALUES(11, 'Dr.Rutuja', 'Dietician', 'Wednesday', '18726578976',5);
INSERT INTO Doctors VALUES(12, 'Dr.Gayatri', 'Neurologist', 'Sunday', '98735678176',6);
INSERT INTO Doctors VALUES(13, 'Dr.Amar', 'Dietician', 'Thursday', '7890876543',5);
 INSERT INTO Doctors VALUES(13, 'Dr.Amar', 'Dietician', 'Thursday', '7890876543',5);
 INSERT INTO Doctors VALUES(14, 'Dr.Aditya', 'Cardiologist', 'Friday', '6789098765', 4);
INSERT INTO Doctors VALUES(15, 'Dr.Salil', 'Dietician', 'Tuesday', '9872456789', 2);
 INSERT INTO Doctors VALUES(16, 'Dr.Prajwal', 'Gynecologist', 'Saturday', '9865435671', 6);
 INSERT INTO Doctors VALUES(17, 'Dr.Sami', 'Cardiologist', 'Friday', '9876543245',5);
INSERT INTO Doctors VALUES(18, 'Dr.Sakshi', 'Neurologist', 'Wednesday', '9876547892',5);
 INSERT INTO Doctors VALUES(19, 'Dr.Aadinath', 'Gynecologist', 'Thursday', '9875672897', 10)
INSERT INTO Patients VALUES(1,'shruti','Dr.Simran','01-02-22',1,'Good',200);
INSERT INTO Patients VALUES(2,'rahul','Dr.Simran','01-02-22',1,'Good',200);
INSERT INTO Patients VALUES(3,'rohit','Dr.Abhishek','01-02-22',2,'Intermediate',400);
 INSERT INTO Patients VALUES(4, 'raj', 'Dr.Tanuja', '01-02-22', 3, 'Good', 200);
INSERT INTO Patients VALUES(5, 'roshan', 'Dr. Tanuja', '01-02-22', 3, 'Good', 200);
INSERT INTO Patients VALUES(5, 'roshan', 'Dr. Simran', '01-02-22', 1, 'Intermediate', 200);
INSERT INTO Patients VALUES(6, 'nupur', 'Dr. Harsh', '02-02-22', 1, 'Bad', 100);
INSERT INTO Patients VALUES(7, 'sahil', 'Dr. Abhishek', '02-02-22', 2, 'Better', 600);
INSERT INTO Patients VALUES(8, 'shreya', 'Dr. Vedant', '02-02-22', 5, 'Good', 200);
INSERT INTO Patients VALUES(9, 'tanvi', 'Dr. Tanuja', '03-02-22', 3, 'Bad', 500);
INSERT INTO Patients VALUES(10, 'dipti', 'Dr. Simran', '03-02-22', 1, 'Intermediate', 400);
INSERT INTO Patients VALUES(11, 'snehal', 'Dr. Abhishek', '03-02-22', 2, 'Better', 100);
INSERT INTO Patients VALUES(12, 'abhijit', 'Dr. Simran', '04-02-22', 1, 'Good', 200);
INSERT INTO Patients VALUES(13, 'anam', 'Dr. Vedant', '04-02-22', 5, 'Bad', 500);
 INSERT INTO Patients VALUES(13, 'anam', 'Dr. Vedant', '04-02-22', 5, 'Bad', 500);
 INSERT INTO Patients
 VALUES(14, 'sanyukta', 'Dr.Simran', '04-02-22',1, 'Intermediate', 500);
VALUES(14, 'sanyukta', 'Dr.Simran', '04-02-22',1, 'Intermediate',500);

INSERT INTO Patients VALUES(15, 'smruti', 'Dr.Simran', '01-03-22',1, 'Good',600);

INSERT INTO Patients VALUES(16, 'siddhesh', 'Dr.Abhishek', '01-03-22',2, 'Good',200);

INSERT INTO Patients VALUES(17, 'krutik', 'Dr.Vedant', '01-03-22',5, 'Bad',500);

INSERT INTO Patients VALUES(18, 'jay', 'Dr.Tanuja', '02-03-22',3, 'Good',500);

INSERT INTO Patients VALUES(19, 'jayant', 'Dr.Simran', '02-03-22',1, 'Intermediate',200);

INSERT INTO Patients VALUES(20, 'vineet', 'Dr.Vedant', '01-04-22',5, 'Better',400);

INSERT INTO Patients VALUES(21, 'riddhi', 'Dr.Abhishek', '01-04-22',2, 'Bad',200);

INSERT INTO Patients VALUES(23, 'sarthak', 'Dr.Harsh', '02-05-22',4, 'Good',100);

INSERT INTO Patients VALUES(23, 'sarthak', 'Dr.Simran', '02-05-22',1, 'Good',400);

INSERT INTO Patients VALUES(24, 'vash', 'Dr.Vedant', '02-04-22',5, 'Better', 500);
 INSERT INTO Patients VALUES(24,'yash','Dr.Vedant','02-04-22',5,'Better',500);
INSERT INTO Patients VALUES(25,'suraj','Dr.Sanika','04-05-22',6,'Good',200);
 INSERT INTO Timetable VALUES('Monday','Dr.Harsh',4,'10am');
 INSERT INTO Timetable VALUES('Tuesday','Dr.Simran',1,'10am');
 INSERT INTO Timetable VALUES('Wednesday', 'Dr.Rutuja',7,'11am');
 INSERT INTO Timetable VALUES('Thursday', 'Dr.Amar', 8, '1pm');
INSERT INTO Timetable VALUES('Friday', 'Dr.Aditya', 9, '3pm');
INSERT INTO Timetable VALUES('Saturday','Dr.Prajwal',10,'11am');
INSERT INTO Timetable VALUES('Sunday','Dr.Paavana',11,'4pm');
INSERT INTO Timetable VALUES('Monday','Dr.Sanika',6,'10am');
 INSERT INTO Timetable VALUES('Tuesday', 'Dr.Tanuja', 3, '4am');
 INSERT INTO Timetable VALUES('Wednesday','Dr.Sakshi',12,'10pm');
 INSERT INTO Timetable VALUES('Thursday','Dr.Aadinath',13,'8am');
```

```
INSERT INTO Ward VALUES(1,1,10,3);
INSERT INTO Ward VALUES(2,1,12,4);
INSERT INTO Ward VALUES(3,1,13,3);
INSERT INTO Ward VALUES(4,1,10,3);
INSERT INTO Ward VALUES(5,2,9,2);
INSERT INTO Ward VALUES(6,2,8,3);
INSERT INTO Ward VALUES(7,2,10,4);
INSERT INTO Ward VALUES(8,2,9,3);
INSERT INTO Ward VALUES(9,3,13,2);
INSERT INTO Ward VALUES(10,3,10,3);
INSERT INTO Ward VALUES(11,3,13,2);
INSERT INTO Ward VALUES(12,4,10,3);
INSERT INTO Ward VALUES(13,4,9,4);
INSERT INTO Medicines VALUES('01-02-22', 'Dr.Simran', 1, 20, 40);
INSERT INTO Medicines VALUES('01-02-22', 'Dr.Harsh',4,30,50);
INSERT INTO Medicines VALUES('01-02-22', 'Dr.Vedant',5,10,30);
INSERT INTO Medicines VALUES('02-02-22','Dr.Abhishek',2,20,40);
INSERT INTO Medicines VALUES('02-02-22', 'Dr.Tanuja', 3, 40, 60);
INSERT INTO Medicines VALUES('02-02-22','Dr.Sanika',6,10,35);
INSERT INTO Medicines VALUES('02-02-22','Dr.Rutuja',7,34,67);
INSERT INTO Medicines VALUES('03-02-22','Dr.Simran',1,20,40);
INSERT INTO Medicines VALUES('03-02-22', 'Dr.Harsh',4,15,43);
INSERT INTO Medicines VALUES('03-02-22', 'Dr.Simran',1,20,40);
INSERT INTO Medicines VALUES('01-03-22', 'Dr.Vedant',5,12,24);
INSERT INTO Medicines VALUES('01-03-22', 'Dr.Simran',1,23,34);
INSERT INTO Medicines VALUES('01-03-22', 'Dr.Abhishek',2,33,45);
INSERT INTO Medicines VALUES('02-03-22', 'Dr.Harsh',4,22,43);
INSERT INTO Medicines VALUES('02-03-22', 'Dr.Simran',1,20,40);
INSERT INTO Medicines VALUES('01-04-22', 'Dr.Vedant',5,20,40);
INSERT INTO Medicines VALUES('01-04-22', 'Dr.Vedant',5,20,40);
INSERT INTO Medicines VALUES('01-04-22','Dr.Tanuja',3,22,45);
```

Assignment Questions

Q1. Display patient names recommending Dr.Simran.

	Patient_name
1	shruti
2	rahul
3	roshan
4	dipti
5	abhijit
6	sanyukta
7	smruti
8	jayant
9	sarthak

Q2. Display number of patients treated by the same doctor and in the same ward.

Output:-

	Number of patients	Doctor_name	Ward_No
1	1	Dr.Harsh	1
2	9	Dr.Simran	1
3	5	Dr.Abhishek	2
4	3	Dr.Tanuja	3
5	1	Dr.Harsh	4
6	5	Dr.Vedant	5
7	1	Dr.Sanika	6

Q3. Display the average fees taken by each Doctor.

Output:-

	Doctor_name	Average Fees
1	Dr.Abhishek	300
2	Dr.Harsh	100
3	Dr.Sanika	200
4	Dr.Simran	322
5	Dr.Tanuja	400
6	Dr.Vedant	420

Q4. Which specialist has used the maximum number of injections on date '01-02-22'?

Output:-



Q5. How many nurses were present on Wednesday with Dr.Rutuja?

Output:-

	Nurses	Doctor_name
1	4	Dr.Rutuja

Q6. At what time is Dr.Rutuja available on Wednesday?

Output:-



Q7. Count of patients with good condition treated by each doctor?

Output:-

		- 1
	Doctor_name	Number of patients in good condition
1	Dr.Abhishek	1
2	Dr.Harsh	1
3	Dr.Sanika	1
4	Dr.Simran	5
5	Dr.Tanuja	2
6	Dr.Vedant	1

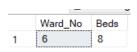
Q8. Wards on which floor has used the minimum number of medicines on date '02-02-22'?

Output:-



Q9. Display ward no. having minimum number of beds.

Output:-



Q10. Display total experience of doctors with specialty as 'Cardiologist'.

Output:-

	Specialty	Total Experience
1	Cardiologist	35

Q11. Display Doctor names and their corresponding floors.

Output:-

	Doctor_name	Floor
1	Dr.Simran	1
2	Dr.Tanuja	1
3	Dr.Harsh	1
4	Dr.Sanika	2
5	Dr.Rutuja	2
6	Dr.Amar	2
7	Dr.Aditya	3
8	Dr.Prajwal	3
9	Dr.Paavana	3
10	Dr.Sakshi	4
11	Dr.Aadinath	4

Q12. Display average Number of beds on each floor.

Output:-

	Floor	Average number of beds
1	1	11
2	2	9
3	3	12
4	4	9

Q13. Display Doctor names and their ward numbers from Patients and Timetable.

	_	9
	Doctor_name	Ward_No
1	Dr.Aadinath	13
2	Dr.Abhishek	2
3	Dr.Aditya	9
4	Dr.Amar	8
5	Dr.Harsh	1
6	Dr.Harsh	4
7	Dr.Paavana	11
8	Dr.Prajwal	10
9	Dr.Rutuja	7
10	Dr.Sakshi	12
11	Dr.Sanika	6
12	Dr.Simran	1
13	Dr.Tanuja	3
14	Dr.Vedant	5

Q14. Display count of patients treated on each day.

Output:-

	Treatment_date	Number of patients
1	01-02-22	5
2	01-03-22	3
3	01-04-22	2
4	02-02-22	3
5	02-03-22	2
6	02-04-22	1
7	02-05-22	2
8	03-02-22	3
9	04-02-22	3
10	04-05-22	1

Q15. Display count of patients from each condition type.

Output:-

	Condition	Number of patients
1	Bad	5
2	Better	4
3	Good	11
4	Intermediate	5

Q16. Display the total number of injections and medicines used by each doctor for doctor having doctor id greater than 3?

	Doctor_name	Total injections and Medicines
1	Dr.Rutuja	2
2	Dr.Sanika	2
3	Dr.Tanuja	4

Q17. Display the medicines consumed on each day starting from most to least.

Output:-

	-	
	Date	(No column name)
1	02-02-22	202
2	03-02-22	123
3	01-02-22	120
4	01-03-22	103
5	01-04-22	85
6	02-03-22	83

Q18. Which ward has treated the most number of patients who went in good condition?

Output:-

	Ward_no	Number of good condition patients
1	1	5
2	3	2
3	4	1
4	5	1
5	6	1
6	2	1

Q19. Give the doctor specialities available at 10am.

Output:-

	Specialty	Time
1	Dietician	10am
2	Cardiologist	10am
3	Gynecologist	10am

Q20. Display the number of nurses using more than 20 injections in each ward.

Output:-

	Ward_No	Nurses	Injections
1	1	3	23
2	2	4	33
3	3	3	22
4	3	3	40
5	4	3	22
6	4	3	30
7	7	4	34

Q21. Display number of patients treated by doctors having more than 3 years of experience in each ward.

Output:-

		,	
	Ward_No	Number of patients	Experience
1	2	5	4
2	1	1	5
3	4	1	5
4	1	9	6
5	5	5	10

Q22. Display the contact nos. each patient should contact in case of further assistance.

	Patient_name	Contact_No
1	shruti	995671866
2	rahul	995671866
3	rohit	8756128765
4	raj	9875617286
5	roshan	995671866
6	nupur	9876543210
7	sahil	8756128765
8	shreya	678195278
9	tanvi	9875617286
10	dipti	995671866
11	snehal	8756128765
12	abhijit	995671866
13	anam	678195278
14	sanyukta	995671866
15	smruti	995671866
16	siddhesh	8756128765
17	krutik	678195278
18	jay	9875617286
19	jayant	995671866
20	vineet	678195278
21	riddhi	8756128765
22	vishaka	9876543210
23	sarthak	995671866
24	yash	678195278
25	suraj	9876524516

Q23. How many doctors are available at each time of the day?

Output:-

	Time	Number of doctors
1	10am	3
2	10pm	1
3	11am	2
4	1pm	1
5	3pm	1
6	4am	1
7	4pm	1
8	8am	1

Q24. Display Doctor_ID and names treating patients having 's' as their initial.

	Doctor_ID	Doctor_name	Patient_name
1	2	Dr.Simran	shruti
2	2	Dr.Simran	sanyukta
3	2	Dr.Simran	smruti
4	2	Dr.Simran	sarthak
5	3	Dr.Abhishek	sahil
6	3	Dr.Abhishek	snehal
7	3	Dr.Abhishek	siddhesh
8	1	Dr.Vedant	shreya
9	5	Dr.Sanika	suraj

Q25. Which doctor can see a patient if Dr. Simran is not available?

	Day	Doctor_name
1	Tuesday	Dr.Tanuja