DBMS ASSIGNMENT-3

Creating the database

CREATE DATABASE IF NOT EXISTS MedicineReminderDB;

USE MedicineReminderDB;

Creating the Medicines Table

CREATE TABLE IF NOT EXISTS Medicines (

   MedicineID INT PRIMARY KEY,

   MedicineName VARCHAR(255) NOT NULL,

   Dosage VARCHAR(50) NOT NULL,

   Frequency VARCHAR(50) NOT NULL

);

Creating the Doctors Table

CREATE TABLE IF NOT EXISTS Doctors (

   DoctorID INT PRIMARY KEY,

   DoctorName VARCHAR(255) NOT NULL,

   Specialization VARCHAR(255) NOT NULL,

   ContactNumber VARCHAR(15) NOT NULL,

   Email VARCHAR(255) NOT NULL

);

Creating the Users Table

CREATE TABLE IF NOT EXISTS Users (

   UserID INT PRIMARY KEY,

   Username VARCHAR(255) NOT NULL,

```
    Password VARCHAR(255) NOT NULL,

    Email VARCHAR(255) NOT NULL
);
```

Creating the Prescriptions Table

```
CREATE TABLE IF NOT EXISTS Prescriptions (

    PrescriptionID INT PRIMARY KEY,

    UserID INT,

    DoctorID INT,

    DatePrescribed DATE,

    Notes TEXT,

    FOREIGN KEY (UserID) REFERENCES Users(UserID),

    FOREIGN KEY (DoctorID) REFERENCES Doctors(DoctorID)
);
```

Creating the MedicinePrescription Table

```
CREATE TABLE IF NOT EXISTS MedicinePrescription (

    MedicinePrescriptionID INT PRIMARY KEY,

    PrescriptionID INT,

    MedicineID INT,

    StartDate DATE,

    EndDate DATE,

    Instructions TEXT,

    FOREIGN KEY (PrescriptionID) REFERENCES Prescriptions(PrescriptionID),

    FOREIGN KEY (MedicineID) REFERENCES Medicines(MedicineID)
);
```

Creating the MedicineReminder Table

```sql
CREATE TABLE IF NOT EXISTS MedicineReminder (

    ReminderID INT PRIMARY KEY,

    UserID INT,

    MedicinePrescriptionID INT,

    MorningReminder BOOLEAN,

    AfternoonReminder BOOLEAN,

    NightReminder BOOLEAN,

    FOREIGN KEY (UserID) REFERENCES Users(UserID),

    FOREIGN KEY (MedicinePrescriptionID) REFERENCES
MedicinePrescription(MedicinePrescriptionID)

);
```

Creating the IntakeLog Table

```sql
CREATE TABLE IF NOT EXISTS IntakeLog (

    LogID INT PRIMARY KEY,

    UserID INT,

    MedicinePrescriptionID INT,

    IntakeDateTime DATETIME,

    DosageTaken VARCHAR(50),

    Status VARCHAR(50),

    FOREIGN KEY (UserID) REFERENCES Users(UserID),

    FOREIGN KEY (MedicinePrescriptionID) REFERENCES
MedicinePrescription(MedicinePrescriptionID)

);
```

Inserting values to the tables

```sql
INSERT INTO Medicines (MedicineID, MedicineName, Dosage, Frequency)

VALUES

  (1, 'MedicineA', '10mg', 'Once a day'),
```

```sql
  (2, 'MedicineB', '5mg', 'Twice a day'),

  (3, 'MedicineC', '20mg', 'Three times a day'),

  (4, 'MedicineD', '15mg', 'Once a day');


INSERT INTO Doctors (DoctorID, DoctorName, Specialization, ContactNumber, Email)
VALUES

  (1, 'Dr. Rajagopalan', 'Cardiologist', '1234567890', 'rajagopalan@example.com'),

  (2, 'Dr. Smith', 'Orthopedic', '9876543210', 'smith@example.com');


INSERT INTO Users (UserID, Username, Password, Email)
VALUES

  (1, 'Shajahan S J', 'password123', 'shajahan@example.com'),

  (2, 'John Doe', 'pass456', 'john@example.com');


INSERT INTO Prescriptions (PrescriptionID, UserID, DoctorID, DatePrescribed, Notes)
VALUES

  (1, 1, 1, '2023-01-15', 'Follow the instructions carefully'),

  (2, 1, 2, '2023-02-20', 'Take medications with meals');


INSERT INTO MedicinePrescription (MedicinePrescriptionID, PrescriptionID, MedicineID,
StartDate, EndDate, Instructions)
VALUES

  (1, 1, 1, '2023-01-15', '2023-01-30', 'Take after breakfast'),

  (2, 1, 2, '2023-01-15', '2023-01-30', 'Take in the morning'),

  (3, 2, 3, '2023-02-20', '2023-03-05', 'Take with water'),

  (4, 2, 4, '2023-02-20', '2023-03-05', 'Take before bedtime');


INSERT INTO MedicineReminder (ReminderID, UserID, MedicinePrescriptionID,
MorningReminder, AfternoonReminder, NightReminder)
```

VALUES

  (1, 1, 1, 1, 0, 1),

  (2, 1, 2, 1, 1, 0),

  (3, 2, 3, 1, 1, 1),

  (4, 2, 4, 0, 1, 0);

INSERT INTO IntakeLog (LogID, UserID, MedicinePrescriptionID, IntakeDateTime, DosageTaken, Status)

VALUES

  (1, 1, 1, '2023-01-15 08:00:00', '10mg', 'Taken'),

  (2, 1, 2, '2023-01-15 12:30:00', '5mg', 'Missed'),

  (3, 2, 3, '2023-02-20 10:00:00', '20mg', 'Taken'),

  (4, 2, 4, '2023-02-20 22:00:00', '15mg', 'Taken');

Question 35

a. List all the medicines taken by "Shajahan S J" and their dosage

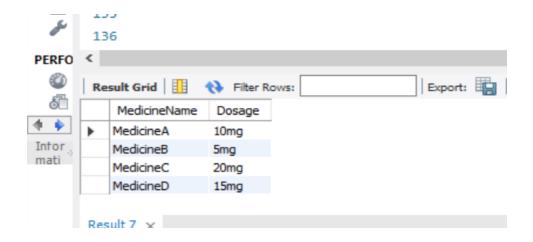SELECT Medicines.MedicineName, Medicines.Dosage

FROM Medicines

JOIN MedicinePrescription ON Medicines.MedicineID = MedicinePrescription.MedicineID

JOIN Prescriptions ON MedicinePrescription.PrescriptionID = Prescriptions.PrescriptionID

JOIN Users ON Prescriptions.UserID = Users.UserID

WHERE Users.Username = 'Shajahan S J';

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Result Grid | Filter Rows: | Export:

MedicineName	Dosage
MedicineA	10mg
MedicineB	5mg
MedicineC	20mg
MedicineD	15mg

Result 7 ×

b. List the patients who are under "Dr.Rajagopalan"

SELECT Users.Username AS PatientName

FROM Users

JOIN Prescriptions ON Users.UserID = Prescriptions.UserID

JOIN Doctors ON Prescriptions.DoctorID = Doctors.DoctorID

WHERE Doctors.DoctorName = 'Dr. Rajagopalan';

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PERFO

Result Grid | Filter Rows: | Export:

PatientName
Shajahan S J