Medical Center - Full SQL Schema Setup Script (With Drop Statements)

-- Drop tables in reverse dependency order  
DROP TABLE IF EXISTS visitdiseases;  
DROP TABLE IF EXISTS visits;  
DROP TABLE IF EXISTS diseases;  
DROP TABLE IF EXISTS doctors;  
DROP TABLE IF EXISTS patients;  
DROP TABLE IF EXISTS medicalcenters;  
  
-- Create MedicalCenters table  
CREATE TABLE medicalcenters (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL  
);  
  
-- Create Doctors table  
CREATE TABLE doctors (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL,  
 specialty TEXT,  
 medical\_center\_id INTEGER REFERENCES medicalcenters(id)  
);  
  
-- Create Patients table  
CREATE TABLE patients (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL,  
 dob DATE,  
 gender TEXT  
);  
  
-- Create Diseases table  
CREATE TABLE diseases (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL  
);  
  
-- Create Visits table (join table for patients and doctors)  
CREATE TABLE visits (  
 id SERIAL PRIMARY KEY,  
 patient\_id INTEGER REFERENCES patients(id),  
 doctor\_id INTEGER REFERENCES doctors(id),  
 visit\_date DATE DEFAULT CURRENT\_DATE  
);  
  
-- Create VisitDiseases table (many-to-many between visits and diseases)  
CREATE TABLE visitdiseases (  
 visit\_id INTEGER REFERENCES visits(id),  
 disease\_id INTEGER REFERENCES diseases(id),  
 PRIMARY KEY (visit\_id, disease\_id)  
);  
  
-- Optional seed data  
INSERT INTO medicalcenters (name) VALUES ('Downtown Clinic'), ('Uptown Hospital');  
  
INSERT INTO doctors (name, specialty, medical\_center\_id) VALUES  
('Dr. Alice Smith', 'Cardiology', 1),  
('Dr. Bob Jones', 'Dermatology', 1),  
('Dr. Carol Lin', 'General Practice', 2);  
  
INSERT INTO patients (name, dob, gender) VALUES  
('John Doe', '1990-04-10', 'Male'),  
('Jane Roe', '1985-12-22', 'Female');  
  
INSERT INTO diseases (name) VALUES  
('Hypertension'),  
('Eczema'),  
('Common Cold');  
  
INSERT INTO visits (patient\_id, doctor\_id, visit\_date) VALUES  
(1, 1, '2024-04-01'),  
(1, 2, '2024-04-02'),  
(2, 3, '2024-04-03');  
  
INSERT INTO visitdiseases (visit\_id, disease\_id) VALUES  
(1, 1),  
(2, 2),  
(3, 3);