-- إنشاء قاعدة البيانات (اختياري)
CREATE DATABASE PrimaryCareClinicDB;
GO

USE PrimaryCareClinicDB;
GO

-- 1. جدول الوحدات الإدارية

CREATE TABLE AdministrativeUnits (
AdministrativeUnitID INT IDENTITY(1,1) PRIMARY KEY,
UnitName NVARCHAR(100) NOT NULL,
Description NVARCHAR(255) NULL
);
GO

-- 2. جدول العيادات

CREATE TABLE Clinics (
ClinicID INT IDENTITY(1,1) PRIMARY KEY,
ClinicName NVARCHAR(100) NOT NULL,
Address NVARCHAR(255) NOT NULL,
ContactDetails NVARCHAR(100) NOT NULL,
AdministrativeUnitID INT NOT NULL,
IsActive BIT NOT NULL DEFAULT(1),
CONSTRAINT FK_Clinics_AdministrativeUnits FOREIGN KEY (AdministrativeUnitID)
REFERENCES AdministrativeUnits(AdministrativeUnitID)
);
GO

-- 3. جدول الأدوار

CREATE TABLE Roles (
RoleID INT IDENTITY(1,1) PRIMARY KEY,
RoleName NVARCHAR(50) NOT NULL,
Description NVARCHAR(255) NULL
);
GO

-- 4. جدول المستخدمين

CREATE TABLE Users (
UserID INT IDENTITY(1,1) PRIMARY KEY,
Username NVARCHAR(50) NOT NULL,

```sql
    PasswordHash NVARCHAR(255) NOT NULL,
    Email NVARCHAR(100) NOT NULL,
    FullName NVARCHAR(100) NOT NULL,
    RoleID INT NOT NULL,
    ClinicID INT NULL,
    IsActive BIT NOT NULL DEFAULT(1),
    CreatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    LastLoginDate DATETIME NULL,
    CONSTRAINT FK_Users_Roles FOREIGN KEY (RoleID)
        REFERENCES Roles(RoleID),
    CONSTRAINT FK_Users_Clinics FOREIGN KEY (ClinicID)
        REFERENCES Clinics(ClinicID)
);
GO
```

-- 5. جدول المرضى

```sql
CREATE TABLE Patients (
    PatientID INT IDENTITY(1,1) PRIMARY KEY,
    FirstName NVARCHAR(50) NOT NULL,
    LastName NVARCHAR(50) NOT NULL,
    DateOfBirth DATE NOT NULL,
    Gender NVARCHAR(10) NOT NULL,
    NationalID NVARCHAR(50) NULL,
    PassportNumber NVARCHAR(50) NULL,
    ContactNumber NVARCHAR(20) NOT NULL,
    Email NVARCHAR(100) NULL,
    Address NVARCHAR(255) NOT NULL,
    EmployerID INT NULL,  -- يمكن الربط بجدول آخر للجهات أو تركه كحقل نصي
    RegistrationType NVARCHAR(20) NOT NULL,  -- مثال: 'Employer' أو 'Independent'
    RegistrationDate DATETIME NOT NULL DEFAULT(GETDATE()),
    IsActive BIT NOT NULL DEFAULT(1)
);
GO
```

-- 6. جدول حالات الملفات الطبية

```sql
CREATE TABLE MedicalFileStatus (
    StatusID INT IDENTITY(1,1) PRIMARY KEY,
    StatusName NVARCHAR(50) NOT NULL,
    Description NVARCHAR(255) NULL
);
GO
```

-- 7. جدول الملفات الطبية

```sql
-- ------------------------------------
CREATE TABLE MedicalFiles (
    FileID INT IDENTITY(1,1) PRIMARY KEY,
    PatientID INT NOT NULL,
    CreatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    StatusID INT NOT NULL,
    AssignedSpecialistID INT NULL,
    ClinicID INT NOT NULL,
    ReferralType NVARCHAR(50) NOT NULL, -- مثال: 'EmployerReferral' أو 'SelfReferral'
    LastUpdatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    Notes NVARCHAR(500) NULL,
    CONSTRAINT FK_MedicalFiles_Patients FOREIGN KEY (PatientID)
        REFERENCES Patients(PatientID),
    CONSTRAINT FK_MedicalFiles_Status FOREIGN KEY (StatusID)
        REFERENCES MedicalFileStatus(StatusID),
    CONSTRAINT FK_MedicalFiles_Specialist FOREIGN KEY (AssignedSpecialistID)
        REFERENCES Users(UserID),
    CONSTRAINT FK_MedicalFiles_Clinics FOREIGN KEY (ClinicID)
        REFERENCES Clinics(ClinicID)
);
GO


-- ------------------------------------
-- 8. جدول جلسات العلاج
-- ------------------------------------
CREATE TABLE TreatmentSessions (
    SessionID INT IDENTITY(1,1) PRIMARY KEY,
    FileID INT NOT NULL,
    SessionDate DATETIME NOT NULL,
    Description NVARCHAR(500) NOT NULL,
    SpecialistNotes NVARCHAR(500) NULL,
    Outcome NVARCHAR(50) NULL, -- مثال: 'Worsened', 'NoChange', 'Improved'
    CreatedBy INT NOT NULL,
    CreatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    CONSTRAINT FK_TreatmentSessions_MedicalFiles FOREIGN KEY (FileID)
        REFERENCES MedicalFiles(FileID),
    CONSTRAINT FK_TreatmentSessions_CreatedBy FOREIGN KEY (CreatedBy)
        REFERENCES Users(UserID)
);
GO


-- ------------------------------------
-- 9. جدول أنواع المرفقات
-- ------------------------------------
CREATE TABLE AttachmentTypes (
    AttachmentTypeID INT IDENTITY(1,1) PRIMARY KEY,
    TypeName NVARCHAR(50) NOT NULL, -- مثال: 'Test Result', 'Evaluation Document',
    "Prescription
```

```sql
    Description NVARCHAR(255) NULL
);
GO


------------------------------------
-- 10. جدول المرفقات
------------------------------------
CREATE TABLE Attachments (
    AttachmentID INT IDENTITY(1,1) PRIMARY KEY,
    FileID INT NULL,          -- يمكن أن تكون مرتبطة بالملف العام
    SessionID INT NULL,       -- أو مرتبطة بجلسة علاج محددة
    AttachmentTypeID INT NOT NULL,
    FilePath NVARCHAR(255) NOT NULL,
    FileName NVARCHAR(100) NOT NULL,
    UploadedBy INT NOT NULL,
    UploadedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    Description NVARCHAR(255) NULL,
    CONSTRAINT FK_Attachments_MedicalFiles FOREIGN KEY (FileID)
        REFERENCES MedicalFiles(FileID),
    CONSTRAINT FK_Attachments_TreatmentSessions FOREIGN KEY (SessionID)
        REFERENCES TreatmentSessions(SessionID),
    CONSTRAINT FK_Attachments_AttachmentTypes FOREIGN KEY (AttachmentTypeID)
        REFERENCES AttachmentTypes(AttachmentTypeID),
    CONSTRAINT FK_Attachments_UploadedBy FOREIGN KEY (UploadedBy)
        REFERENCES Users(UserID)
);
GO


------------------------------------
-- 11. جدول التوصيات والإجراءات النهائية
------------------------------------
CREATE TABLE RecommendationsFinalActions (
    RecommendationID INT IDENTITY(1,1) PRIMARY KEY,
    FileID INT NOT NULL,
    RecommendationText NVARCHAR(500) NOT NULL,
    FinalDecisionDate DATETIME NOT NULL,
    SpecialistID INT NOT NULL,
    Comments NVARCHAR(500) NULL,
    CONSTRAINT FK_Recommendations_File FOREIGN KEY (FileID)
        REFERENCES MedicalFiles(FileID),
    CONSTRAINT FK_Recommendations_Specialist FOREIGN KEY (SpecialistID)
        REFERENCES Users(UserID)
);
GO


------------------------------------
-- 12. جدول حالات المواعيد
------------------------------------
```

```sql
CREATE TABLE AppointmentStatuses (
    AppointmentStatusID INT IDENTITY(1,1) PRIMARY KEY,
    StatusName NVARCHAR(50) NOT NULL,
    Description NVARCHAR(255) NULL
);
GO


------------------------------------
-- 13. جدول المواعيد
------------------------------------
CREATE TABLE Appointments (
    AppointmentID INT IDENTITY(1,1) PRIMARY KEY,
    FileID INT NOT NULL,
    PatientID INT NOT NULL,
    SpecialistID INT NOT NULL,
    ClinicID INT NOT NULL,
    AppointmentDateTime DATETIME NOT NULL,
    DurationMinutes INT NOT NULL,
    AppointmentStatusID INT NOT NULL,
    CreatedBy INT NOT NULL,
    CreatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    UpdatedDate DATETIME NULL,
    Comments NVARCHAR(500) NULL,
    CONSTRAINT FK_Appointments_MedicalFiles FOREIGN KEY (FileID)
        REFERENCES MedicalFiles(FileID),
    CONSTRAINT FK_Appointments_Patients FOREIGN KEY (PatientID)
        REFERENCES Patients(PatientID),
    CONSTRAINT FK_Appointments_Specialist FOREIGN KEY (SpecialistID)
        REFERENCES Users(UserID),
    CONSTRAINT FK_Appointments_Clinics FOREIGN KEY (ClinicID)
        REFERENCES Clinics(ClinicID),
    CONSTRAINT FK_Appointments_Status FOREIGN KEY (AppointmentStatusID)
        REFERENCES AppointmentStatuses(AppointmentStatusID),
    CONSTRAINT FK_Appointments_CreatedBy FOREIGN KEY (CreatedBy)
        REFERENCES Users(UserID)
);
GO


------------------------------------
-- 14. جدول سجل التدقيق
------------------------------------
CREATE TABLE AuditLogs (
    AuditLogID INT IDENTITY(1,1) PRIMARY KEY,
    TableName NVARCHAR(100) NOT NULL,
    RecordID INT NOT NULL,
    ActionType NVARCHAR(20) NOT NULL, -- مثال: 'INSERT', 'UPDATE', 'DELETE'
    ChangedBy INT NOT NULL,
    ChangeDate DATETIME NOT NULL DEFAULT(GETDATE()),
```

```sql
                    ,ChangeDetails NVARCHAR(MAX) NULL
    CONSTRAINT FK_AuditLogs_ChangedBy FOREIGN KEY (ChangedBy)
                                    REFERENCES Users(UserID)
);
GO


------------------------------------
-- 15. جدول ساعات عمل العيادة
------------------------------------
CREATE TABLE ClinicWorkingHours (
    WorkingHourID INT IDENTITY(1,1) PRIMARY KEY,
    ClinicID INT NOT NULL,
    DayOfWeek INT NOT NULL, -- 1 للاثنين ... 7 للأحد
    StartTime TIME NOT NULL,
    EndTime TIME NOT NULL,
    IsActive BIT NOT NULL DEFAULT(1),
    CONSTRAINT FK_ClinicWorkingHours_Clinics FOREIGN KEY (ClinicID)
        REFERENCES Clinics(ClinicID)
);
GO


------------------------------------
-- 16. جدول توافر الأخصائي
------------------------------------
CREATE TABLE SpecialistAvailability (
    AvailabilityID INT IDENTITY(1,1) PRIMARY KEY,
    SpecialistID INT NOT NULL,
    [Date] DATE NOT NULL,
    StartTime TIME NOT NULL,
    EndTime TIME NOT NULL,
    IsBooked BIT NOT NULL DEFAULT(0),
    CONSTRAINT FK_SpecialistAvailability_Users FOREIGN KEY (SpecialistID)
        REFERENCES Users(UserID)
);
GO


------------------------------------
-- 17. جدول الإشعارات
------------------------------------
CREATE TABLE Notifications (
    NotificationID INT IDENTITY(1,1) PRIMARY KEY,
    UserID INT NOT NULL,
    Message NVARCHAR(500) NOT NULL,
    NotificationType NVARCHAR(50) NOT NULL, -- مثال: 'Appointment', 'Alert', 'Reminder'
    IsRead BIT NOT NULL DEFAULT(0),
    CreatedDate DATETIME NOT NULL DEFAULT(GETDATE()),
    RelatedRecordID INT NULL,
    CONSTRAINT FK_Notifications_Users FOREIGN KEY (UserID)
```

(REFERENCES Users(UserID

;(

GO

(REFERENCES Users(UserID

;(

GO