**Scenario: Hospital Management System**

**Tables in SQL Server:**

**1. Doctors**

CREATE TABLE Doctors (

DoctorId INT PRIMARY KEY,

Name NVARCHAR(100),

Specialization NVARCHAR(100)

);

**2. Appointments**

CREATE TABLE Appointments (

AppointmentId INT PRIMARY KEY,

PatientName NVARCHAR(100),

AppointmentDate DATETIME,

DoctorId INT FOREIGN KEY REFERENCES Doctors(DoctorId)

);

This means **each appointment is linked to a doctor** — a classic foreign key relationship.

**Step 2: Build Console-Based Functionality**

In your Program.cs, implement the following features:

**a) Display All Appointments with Doctor Info**

* Fetch all appointments from the database.
* Use **eager loading (Include)** to load the related doctor.
* Display each appointment’s:
  + Patient name
  + Appointment date
  + Doctor name
  + Doctor specialization

**b) Add New Appointment**

* Ask the user to enter:
  + Patient name
  + Appointment date
* Fetch all available doctors from the database and display them in a numbered list.
* Let the user choose a doctor by entering the doctor’s ID.
* Create a new Appointment record and save it to the database.

**Expected Console Output**

--- Existing Appointments ---

1. John Doe - 2025-07-05 - Dr. Smith (Cardiology)

2. Jane Roe - 2025-07-07 - Dr. Kumar (Dermatology)

--- Add New Appointment ---

Enter Patient Name: Alice Johnson

Enter Appointment Date (yyyy-mm-dd): 2025-07-10

Available Doctors:

1. Dr. Smith - Cardiology

2. Dr. Kumar - Dermatology

Enter Doctor ID: 1

Appointment added successfully!