```sql
-- Create a list of patients and the medications they currently take. Sort your list
-- by patient's last name and medication name in alphabetical order. Include other
-- applicable details such as date prescribed and dosage.
-- Query a
SELECT p.Lname AS LastName, p.Fname AS FirstName, m.DrugName, pm.PrescripStart AS
DatePrescribed, m.Dosage
FROM Person p
INNER JOIN Patient a ON p.PersonID = a.PatientID
INNER JOIN Patient_Medication pm ON pm.PatientID = p.PersonID
INNER JOIN Medication m ON m.MedicationID = pm.MedicationID
WHERE pm.PrescripStart < DATE('now')
AND pm.PrescripEnd > DATE('now') OR pm.PrescripEnd IS NULL
ORDER BY p.Lname, m.DrugName;



-- Display patient information for patients who currently have Delta Dental insurance
-- policy.
-- Query b
SELECT p.Lname AS LastName, p.Fname AS FirstName, a.LastSignedHIPPAA, a.LastXRay,
ip.PlanID AS InsurancePlanID
FROM Person p
INNER JOIN Patient a ON p.PersonID = a.PatientID
INNER JOIN InsurancePlan ip ON a.PatientID = ip.PatientID
INNER JOIN InsuranceCompany ic ON ip.CompanyID = ic.CompanyID
WHERE ic.CompanyName = 'Delta Dental';




-- Generate a list of procedures and service dates performed by Dr. Smilow
-- Query c
SELECT pr.ProcedureID, pr.ProcedureType, pr.ProcedureDate
FROM Person p
INNER JOIN Employee e ON p.PersonID = e.EmployeeID
INNER JOIN Licensure l ON e.EmployeeID = l.MedicalID
INNER JOIN Licensure_Procedure lp ON l.LicenseNumber = lp.LicenseNumber
INNER JOIN Procedure pr ON lp.ProcedureID = pr.ProcedureID
WHERE p.LName = 'Smilow';
```

```sql
-- Print out a list of due invoices with patient contact info.
-- Query d
SELECT p.LName, p.FName, p.PhoneNumber, i.InvoiceID, i.BillingDate, i.Amount
FROM Person p
INNER JOIN Patient pa ON p.PersonID = pa.PatientID
INNER JOIN Payment pay ON pa.PatientID = pay.PatientID
INNER JOIN Invoice_Payment ip ON pay.PaymentID = ip.PaymentID
INNER JOIN Invoice i ON ip.InvoiceID = i.InvoiceID
WHERE i.Amount > 0 AND i.BillingDate + 30 < DATE('now');




-- Find the patients who brought in the most revenue in the past year.
-- Query e
SELECT Person.fname, Person.Lname, SUM(Invoice.Amount)
FROM Patient, Person, Appointment, Invoice
WHERE Patient.PatientID = Person.PersonID
AND Appointment.PatientID = Patient.PatientID
AND Invoice.ApptID = Appointment.ApptID
AND Invoice.BillingDate >= '2022-01-01'
AND Invoice.BillingDate < '2023-01-01'
GROUP BY Patient.PatientID
ORDER BY SUM(Invoice.Amount) DESC;




-- Create a list of doctors who performed less than 5 procedures this year.
-- Query f
SELECT Employee.EmployeeID, Person.Fname, Person.Lname, COUNT(*) AS Total_Procedures
FROM Person, Employee, Licensure, Licensure_Procedure, Procedure
WHERE  Employee.MedicalFlag = 1
AND Person.PersonID = Employee.EmployeeID
AND  Licensure.MedicalID = Employee.EmployeeID
AND Licensure.LicenseNumber = Licensure_Procedure.LicenseNumber
AND Licensure_Procedure.ProcedureID = Procedure.ProcedureID
AND Procedure.ProcedureDate > '2023-01-01'
GROUP BY Employee.EmployeeID
HAVING Total_Procedures < 5;
```

```sql
-- g: Find the highest paying procedures, procedure price, and the total number of
those
-- procedures performed. Sort your list with highest paying procedures showing at the
top of your list.
SELECT P.proceduretype, P.unitcharge, count(*) AS TotalNumberProcedurePerformed
FROM Procedure as P
GROUP by P.proceduretype
ORDER BY unitcharge DESC;




--h: Create a list of all payment types accepted, number of times each of them was
used, and total
--amount charged to that type of payment.
SELECT P.PaymentType as PaymentTypeAccepted, count(*) as NumberOfTimesUsed,
SUM(P.Amount) as TotalAmountCharged
FROM Payment as P
GROUP by P.Paymenttype;




--i: Find the name of the most popular insurance plan currently used by the patients
SELECT I.InsurancePlanType, count(*) as NumberOfTimesUsed
FROM InsurancePlan as I
GROUP by I.InsurancePlanType
ORDER BY NumberOfTimesUsed DESC
limit 1;
```