RDBMS Task 3

1. Find the Total Number of Appointments for Each Doctor

SELECT DoctorID, COUNT(\*) AS TotalAppointments

FROM Appointments GROUP BY DoctorID;

1. List All Patients Who Have an Appointment with a Speciﬁc Doctor (e.g., Dr. John Smith)

SELECT p.PatientID, p.FirstName, p.LastName

FROM Patients p

JOIN Appointments a ON p.PatientID = a.PatientID JOIN Doctors d ON a.DoctorID = d.DoctorID

WHERE d.FirstName = 'John' AND d.LastName = 'Smith';

1. Find the Number of Appointments Scheduled in a Speciﬁc Department

SELECT DepartmentID, COUNT(\*) AS TotalAppointments

FROM Appointments

WHERE DepartmentID = [SPECIFIC\_DEPARTMENT\_ID]

GROUP BY DepartmentID;

1. Find the Most Popular Specialty Based on Number of Appointments

SELECT s.SpecialtyName, COUNT(\*) AS TotalAppointments

FROM Specialties s

JOIN Doctors d ON s.SpecialtyID = d.SpecialtyID JOIN Appointments a ON d.DoctorID = a.DoctorID GROUP BY s.SpecialtyName

ORDER BY TotalAppointments DESC LIMIT 1;

1. Get the Total Payment Amount for All Completed Appointments

SELECT SUM(PaymentAmount) AS TotalPayments

FROM Payments

WHERE AppointmentStatus = 'Completed';

1. Find the Number of Patients Seen by Each Doctor

SELECT a.DoctorID, COUNT(DISTINCT a.PatientID) AS TotalPatients FROM Appointments a

WHERE a.AppointmentStatus = 'Completed' GROUP BY a.DoctorID;

1. List All Patients Who Have Missed Their Appointments (Status 'Cancelled')

SELECT p.PatientID, p.FirstName, p.LastName

FROM Patients p

JOIN Appointments a ON p.PatientID = a.PatientID WHERE a.AppointmentStatus = 'Cancelled';

1. Find the Total Number of Appointments for Each Status (Scheduled, Completed, Cancelled)

SELECT AppointmentStatus, COUNT(\*) AS TotalAppointments

FROM Appointments

GROUP BY AppointmentStatus;

1. Get the Average Payment Amount for Completed Appointments

SELECT AVG(PaymentAmount) AS AveragePayment

FROM Payments

WHERE AppointmentStatus = 'Completed';

1. Find the Doctor with the Highest Number of Appointments

SELECT DoctorID, COUNT(\*) AS TotalAppointments

FROM Appointments GROUP BY DoctorID

ORDER BY TotalAppointments DESC LIMIT 1;