

RDBMS TASK 6

Appointment

1. Find the Total Number of Appointments for Each Doctor

```
SELECT d.first_name, d.last_name, COUNT(a.appointment_id) AS  
total_appointments  
FROM Doctors d  
LEFT JOIN Appointments a ON d.doctor_id = a.doctor_id  
GROUP BY d.doctor_id
```

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

```
SELECT p.first_name, p.last_name, p.email, p.phone, a.appointment_date  
FROM Appointments a  
JOIN Patients p ON a.patient_id = p.patient_id  
JOIN Doctors d ON a.doctor_id = d.doctor_id  
WHERE d.first_name = 'Rajesh' AND d.last_name = 'Sharma';
```

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

```
SELECT dep.department_name, COUNT(a.appointment_id) AS total_appointments  
FROM Appointments a  
JOIN Doctors d ON a.doctor_id = d.doctor_id  
JOIN Departments dep ON d.department_id = dep.department_id  
WHERE dep.department_name = 'Cardiology'  
GROUP BY dep.department_id;
```

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

```
SELECT sp.specialty_name, COUNT(a.appointment_id) AS total_appointments  
FROM Appointments a  
JOIN Doctors d ON a.doctor_id = d.doctor_id  
JOIN Specialties sp ON d.specialty_id = sp.specialty_id  
GROUP BY sp.specialty_id  
ORDER BY total_appointments DESC
```

LIMIT 1;

5. Get the Total Payment Amount for All Completed Appointments

```
SELECT SUM(p.payment_amount) AS total_payments
FROM Payments p
JOIN Appointments a ON p.appointment_id = a.appointment_id
WHERE a.status = 'Completed';
```

6. Find the Number of Patients Seen by Each Doctor

```
SELECT d.first_name, d.last_name, COUNT(DISTINCT a.patient_id) AS
total_patients
FROM Doctors d
LEFT JOIN Appointments a ON d.doctor_id = a.doctor_id
GROUP BY d.doctor_id;
```

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

```
SELECT p.first_name, p.last_name, p.email, p.phone, a.appointment_date
FROM Appointments a
JOIN Patients p ON a.patient_id = p.patient_id
WHERE a.status = 'Cancelled';
```

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

```
SELECT a.status, COUNT(a.appointment_id) AS total_appointments
FROM Appointments a
GROUP BY a.status;
```

9. Get the Average Payment Amount for Completed Appointments

```
SELECT AVG(p.payment_amount) AS average_payment
FROM Payments p
```

JOIN Appointments a **ON** p.appointment_id = a.appointment_id
WHERE a.status = 'Completed';

10. Find the Doctor with the Highest Number of Appointments

SELECT d.first_name, d.last_name, **COUNT**(a.appointment_id) **AS**
total_appointments
FROM Doctors d
LEFT JOIN Appointments a **ON** d.doctor_id = a.doctor_id
GROUP BY d.doctor_id
ORDER BY total_appointments **DESC**
LIMIT 1;
