

Questions Query

1. Find all the patients who have the appointment "Pending".

```
SELECT p.First_name,p.Last_name,a.App_date,a.App_Status
FROM Patients as p
JOIN
Appointments as a
ON p.Patient_id=a.Patient_id
WHERE a.App_Status='Pending'
```

100 %

Results Messages

| | First_name | Last_name | App_date | App_Status |
|---|------------|-----------|------------|------------|
| 1 | Robert | Brown | 2023-09-27 | Pending |
| 2 | Emily | Davis | 2023-09-28 | Pending |

2. Which patients visited Cardiologist?

```
SELECT p.First_name,p.Last_name,a.App_date,d.Specialization
FROM Patients p
JOIN
Appointments a
ON p.Patient_id=a.Patient_id
JOIN
Doctors d
ON d.Doctor_id=a.Doctor_id
WHERE d.Specialization = 'Cardiologist'
```

100 %

Results Messages

| | First_name | Last_name | App_date | Specialization |
|---|------------|-----------|------------|----------------|
| 1 | John | Doe | 2023-09-25 | Cardiologist |

3. Show all patients who were prescribed "Ibuprofen".

```
SELECT p.First_name,p.Last_name,mr.Prescription
FROM Patients p
JOIN
Medical_records mr
ON p.Patient_id=mr.Patient_id
WHERE mr.Prescription='Ibuprofen'
```

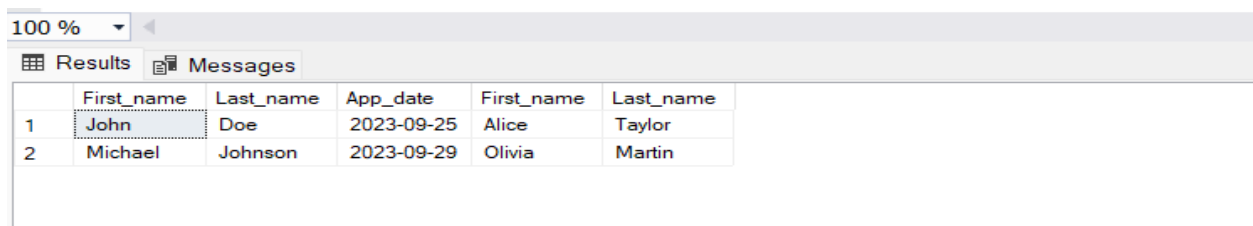


The screenshot shows a database query result in a web interface. At the top, there is a zoom level of 100% and two tabs: 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with the following data:

| | First_name | Last_name | Prescription |
|---|------------|-----------|--------------|
| 1 | Robert | Brown | Ibuprofen |

4. List all completed appointments with patient name and doctors name.

```
SELECT p.First_name,p.Last_name,a.App_date,d.First_name,d.Last_name
FROM Patients p
JOIN
Appointments a
ON p.Patient_id=a.Patient_id
JOIN
Doctors d
ON a.Doctor_id=d.Doctor_id
WHERE a.App_Status='Completed'
```



The screenshot shows a database query result in a web interface. At the top, there is a zoom level of 100% and two tabs: 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with the following data:

| | First_name | Last_name | App_date | First_name | Last_name |
|---|------------|-----------|------------|------------|-----------|
| 1 | John | Doe | 2023-09-25 | Alice | Taylor |
| 2 | Michael | Johnson | 2023-09-29 | Olivia | Martin |

5. Find the next available appointment for Dr. Alice Taylor.

```
SELECT a.App_date,a.App_time
FROM Appointments a
JOIN
Doctors d
ON a.Doctor_id=d.Doctor_id
WHERE d.First_name='Alice' AND d.Last_name='Taylor' AND a.App_Status='Pending'
ORDER BY a.App_date,a.App_time
```

6. How many doctors are there in each department?

```
SELECT dpt.Dept_name,COUNT(d.Doctor_id) AS Doctors
FROM Deapartments dpt
JOIN
Doctors d
ON dpt.Dept_id=d.Dept_id
GROUP BY dpt.Dept_name
ORDER BY dpt.Dept_name
```

100 %

| Results | | | Messages | | |
|---------|-------------|---------|----------|--|--|
| | Dept_name | Doctors | | | |
| 1 | Cardiology | 1 | | | |
| 2 | Dermatology | 1 | | | |
| 3 | Neurology | 1 | | | |
| 4 | Orthopedics | 1 | | | |
| 5 | Pediatrics | 1 | | | |

7. Find the doctor who attended the most patients.

```
SELECT TOP 1 d.First_name,d.Last_name,COUNT(a.Patient_id) AS Patient_count
FROM Appointments a
JOIN
Doctors d
ON a.Doctor_id=d.Doctor_id
GROUP BY d.First_name,d.Last_name
ORDER BY Patient_count DESC
```

| 100 % | | | | |
|------------------|------------|-----------|---------------|--|
| Results Messages | | | | |
| | First_name | Last_name | Patient_count | |
| 1 | Olivia | Martin | 1 | |

8. List all bills that are unpaid and the total amount due.

```
SELECT p.First_name,p.Last_name,b.Bill_id,SUM(b.Total_amount) AS Due_Amount
FROM Billing b
JOIN
Patients p
ON b.Patient_id=p.Patient_id
WHERE b.Payment_status='Unpaid'
GROUP BY p.First_name,p.Last_name,b.Bill_id
ORDER BY Due_Amount
```

| 100 % | | | | |
|------------------|------------|-----------|---------|------------|
| Results Messages | | | | |
| | First_name | Last_name | Bill_id | Due_Amount |
| 1 | Jane | Smith | B002 | 150 |

9. Calculate the total revenue generated from paid bills.

```
SELECT SUM(Total_amount) AS Total_Revenue
```

```
FROM Billing
```

```
WHERE Payment_status='Paid'
```

100 %

Results Messages

| | Total_Revenue |
|---|---------------|
| 1 | 500 |

10. Show the diagnosis and treatment details for patient 'John Doe'.

```
SELECT p.First_name,p.Last_name,mr.Diagnosis,mr.Treatment
```

```
FROM Medical_records mr
```

```
JOIN
```

```
Patients p
```

```
ON mr.Patient_id=p.Patient_id
```

```
WHERE p.First_name='John' AND p.Last_name='Doe'
```

100 %

Results Messages

| | First_name | Last_name | Diagnosis | Treatment |
|---|------------|-----------|--------------|----------------------------------|
| 1 | John | Doe | Hypertension | Lifestyle changes and medication |

11. Which doctors have diagnosed 'Hypertension'?

```
SELECT DISTINCT d.First_name,d.Last_name, mr.Diagnosis
FROM Medical_records mr
JOIN
Doctors d
ON mr.Doctor_id=d.Doctor_id
WHERE mr.Diagnosis='Hypertension'
```

100 %

| Results | | Messages | |
|---------|------------|-----------|--------------|
| | First_name | Last_name | Diagnosis |
| 1 | Alice | Taylor | Hypertension |

12. List all available rooms with their type and department.

```
SELECT r.Room_no,r.Room_type,dpt.Dept_name
FROM Rooms r
JOIN
Deapartments dpt
ON r.Dept_id=dpt.Dept_id
WHERE r.Availability_status='Available'
```

100 %

| Results | | Messages | |
|---------|---------|-----------|------------|
| | Room_no | Room_type | Dept_name |
| 1 | 102 | Shared | Neurology |
| 2 | 104 | Single | Pediatrics |

13. Which departments have staff members with the role of 'Nurse'?

```
SELECT s.Staff_id,s.First_name,s.Last_name,s.Staff_Role,dpt.Dept_name
FROM Staff s
JOIN
Deapartments dpt
ON s.Dept_id=dpt.Dept_id
WHERE s.Staff_Role='Nurse'
```

100 %

| Results | | Messages | | | |
|---------|----------|------------|-----------|------------|------------|
| | Staff_id | First_name | Last_name | Staff_Role | Dept_name |
| 1 | S001 | Liam | Harris | Nurse | Cardiology |
| 2 | S004 | Ava | Wright | Nurse | Pediatrics |

14. List all patients who had an MRI test.

```
SELECT It.Test_name,p.First_name,p.Last_name
FROM Lab_Tests It
JOIN
Patients p
ON It.Patient_id=p.Patient_id
WHERE It.Test_name='MRI'
```

100 %

| Results | | Messages | |
|---------|-----------|------------|-----------|
| | Test_name | First_name | Last_name |
| 1 | MRI | Jane | Smith |

15. Find all test results for patient 'Jane Smith'.

```
SELECT It.Test_name,It.Test_Description,tr.Result,tr.Test_date
FROM Test_Results tr
JOIN
Lab_Tests It
ON It.Test_id=tr.Test_id
JOIN
Patients p
ON tr.Patient_id=p.Patient_id
WHERE p.First_name='Jane' AND p.Last_name='Smith'
```

| 100 % | | | | |
|------------------|-----------|------------------|---------------------------|------------|
| Results Messages | | | | |
| | Test_name | Test_Description | Result | Test_date |
| 1 | MRI | Brain scan | No abnormalities detected | 2023-09-26 |

16. Which patient has spent the most money on their bills?

```
SELECT TOP 1 p.Patient_id,p.First_name,p.Last_name,SUM(b.Total_amount) AS Total_Spent
FROM Billing b
JOIN
Patients p
ON b.Patient_id=p.Patient_id
WHERE b.Payment_status='Paid'
GROUP BY p.Patient_id,p.First_name,p.Last_name
ORDER BY Total_Spent DESC
```

| 100 % | | | | |
|------------------|------------|------------|-----------|-------------|
| Results Messages | | | | |
| | Patient_id | First_name | Last_name | Total_Spent |
| 1 | P005 | Michael | Johnson | 250 |

17. What is the average cost of medication prescribed by each doctor?

```
SELECT d.Doctor_id,d.First_name,d.Last_name,AVG(m.Cost) AS Avg_Cost
FROM Medications m
JOIN
Doctors d
ON M.Doctor_id=d.Doctor_id
GROUP BY d.Doctor_id,d.First_name,d.Last_name
```

100 %

Results

Messages

| | Doctor_id | First_name | Last_name | Avg_Cost |
|---|-----------|------------|-----------|----------|
| 1 | DOC001 | Alice | Taylor | 10 |
| 2 | DOC002 | David | Wilson | 5 |
| 3 | DOC003 | Sophia | Lee | 8 |
| 4 | DOC004 | James | Moore | 12 |
| 5 | DOC005 | Olivia | Martin | 6 |

18. List all tests performed by a specific doctor ('Dr. David Wilson').

```
SELECT It.Test_id,It.Test_name,It.Test_Description
FROM Lab_Tests It
JOIN
Doctors d
ON It.Doctor_id=d.Doctor_id
WHERE d.First_name='David' AND d.Last_name='Wilson'
```

100 %

| Results | | Messages | |
|---------|---------|-----------|------------------|
| | Test_id | Test_name | Test_Description |
| 1 | T002 | MRI | Brain scan |

19. Find patients who were prescribed medication that costs more than \$5.

```
SELECT p.Patient_id,p.First_name,p.Last_name,m.Med_name,m.Cost
```

```
FROM Medications m
```

```
JOIN
```

```
Patients p
```

```
ON m.Patient_id=p.Patient_id
```

```
WHERE m.Cost>5
```

100 %

Results

Messages

| | Patient_id | First_name | Last_name | Med_name | Cost |
|---|------------|------------|-----------|-------------|------|
| 1 | P001 | John | Doe | Amoxicillin | 10 |
| 2 | P003 | Robert | Brown | Metformin | 8 |
| 3 | P004 | Emily | Davis | Omeprazole | 12 |
| 4 | P005 | Michael | Johnson | Aspirin | 6 |