

Patient Table

patient_id	name	gender	date_of_birth	contact_number	address
P-1	John Smith	Male	1985-08-10	1234567890	123 Main St
P-2	Jane Doe	Female	1990-04-15	9876543210	456 Elm St
P-3	Michael Johnson	Male	1978-12-22	5551234567	789 Oak Ave

Doctor Table

doctor_id	name	specialization	contact_number	email	Department_id
D-1	Dr. Emily Adams	Cardiology	5559876543	emily.adams@example.com	DEPT-1
D-2	Dr. Robert Davis	Pediatrics	5551234567	robert.davis@example.com	DEPT-2
D-3	Dr. Sarah Wilson	Orthopedics	5552223333	sarah.wilson@example.com	DEPT-3

Appointments Table

appointment_id	patient_id	doctor_id	appointment_date	appointment_time	reason_for_visit
1	P-1	D-1	2023-07-17	10:00 AM	Chest pain
2	P-2	D-3	2023-07-18	2:30 PM	Broken arm
3	P-3	D-2	2023-07-19	9:15 AM	Fever

MedicalRecords Table

record_id	patient_id	doctor_id	date_of_visit	diagnosis	prescribed_medications
101	P-1	D-1	2023-07-17	Angina	Nitroglycerin
201	P-2	D-3	2023-07-18	Fractured radius	Painkillers, Cast
301	P-3	D-2	2023-07-19	Influenza	Antipyretics

Departments Table

department_id	department_name	department_head	number_of_employees
DEPT-1	Cardiology	Dr. Emily Adams	5
DEPT-2	Pediatrics	Dr. Robert Davis	7
DEPT-3	Orthopedics	Dr. Sarah Wilson	4

Construct the SQL Statements for the following queries. While building the statement, you must use the concept of nested subqueries:

1. Retrieve the names of patients who have appointments with doctors specializing in "Cardiology".
2. Find the names of patients who have visited the same doctor more than once.
3. Retrieve the names of patients who have not had any appointments.
4. Retrieve the names of doctors with more than the average number of appointments. You must use the WITH clause for this query.
5. List the names of doctors who have treated patients of both genders. You must use nested subqueries in the FROM clause.
6. Find the department name with the least number of employees. You must use ALL keyword for this query.