

```
CREATE DATABASE hospital;

USE hospital;

CREATE TABLE Doctor (

    DoctorID INT PRIMARY KEY,

    FullName VARCHAR(100),

    Department VARCHAR(50),

    DateOfBirth DATE,

    ContactNumber VARCHAR(15),

    EmailAddress VARCHAR(100),

    Address VARCHAR(255),

    Specialization VARCHAR(100),

    YearsOfExperience INT,

    WorkSchedule VARCHAR(50),

    PatientID INT,

    FOREIGN KEY (PatientID) REFERENCES Patient(PatientID)

);

INSERT INTO Doctor (DoctorID, FullName, Department, DateOfBirth, ContactNumber,
EmailAddress, Address, Specialization, YearsOfExperience, WorkSchedule, PatientID)
VALUES

(1, 'Dr. Ahmet Yılmaz', 'Cardiology', '1980-05-15', '123-456-7890',
'ahmet.yilmaz@gmail.com', '123 Ana Cadde', 'Cardiologist', 15, 'Monday-Friday', 1),

(2, 'Dr. Kalthoum Kaya', 'Pediatrics', '1975-08-20', '987-654-3210',
'kalthoum.kaya@gmail.com', '456 Elm Sokağı', 'Pediatrician', 20, 'Tuesday-Saturday',
2),

(3, 'Dr. Nur Demir', 'Orthopedics', '1982-11-10', '555-123-4567',
'Nur.demir@gmail.com', '789 Meşe Sokak', 'Orthopedic Surgeon', 12,
'Wednesday-Sunday', 3),

(4, 'Dr. Elif Ateş', 'Oncology', '1978-03-25', '777-888-9999',
'elif.ates@gmail.com', '101 Çam Caddesi', 'Oncologist', 18, 'Thursday-Monday', 4),
```

(5, 'Dr. Joe Aksoy', 'Dermatology', '1985-06-30', '222-333-4444',
'Joe.aksoy@gmail.com', '202 Sedir Sokak', 'Dermatologist', 10, 'Friday-Tuesday', 5),
(6, 'Dr. Philips Scott', 'Neurology', '1970-09-05', '666-777-8888',
'philips.s@gmail.com', '303 Gökner Caddesi', 'Neurologist', 25,
'Saturday-Wednesday', 6),
(7, 'Dr. Micheal Jackson', 'Cardiology', '1988-02-15', '999-888-7777',
'micheal@gmail.com', '404 Akçe Meydanı', 'Cardiologist', 8, 'Sunday-Thursday', 7),
(8, 'Dr. Fatma Beyaz', 'Pediatrics', '1973-12-20', '444-555-6666',
'fatma.beyaz@gmail.com', '505 Ceviz Sokak', 'Pediatrician', 22, 'Monday-Friday', 8),
(9, 'Dr. Engin Savaş', 'Orthopedics', '1983-07-10', '111-222-3333',
'engin.savas@gmail.com', '606 Çam Caddesi', 'Orthopedic Surgeon', 14,
'Tuesday-Saturday', 9),
(10, 'Dr. Yasemin Demir', 'Oncology', '1977-04-18', '888-999-0000',
'yasemin.demir@gmail.com', '707 Meşe Sokak', 'Oncologist', 16, 'Wednesday-Sunday',
10),
(11, 'Dr. Ahmed Ali', 'Cardiology', '1985-03-18', '555-111-2222',
'ahmed.ali@gmail.com', '808 Zeytin Sokağı', 'Cardiologist', 10, 'Monday-Friday',
11),
(12, 'Dr. Aisha Rahman', 'Pediatrics', '1982-06-25', '333-888-9999',
'aisha.rahman@gmail.com', '909 Ceviz Cadde', 'Pediatrician', 15, 'Tuesday-Saturday',
12),
(13, 'Dr. Omar Khan', 'Orthopedics', '1979-09-10', '777-444-5555',
'omar.khan@gmail.com', '1010 Meşe Caddesi', 'Orthopedic Surgeon', 18,
'Wednesday-Sunday', 13),
(14, 'Dr. Fatima Abbas', 'Oncology', '1988-12-05', '999-666-7777',
'fatima.abbas@gmail.com', '1111 Sedir Sokak', 'Oncologist', 20, 'Thursday-Monday',
14),
(15, 'Dr. Muhammad Malik', 'Dermatology', '1975-02-20', '222-777-8888',
'muhammad.malik@gmail.com', '1212 Çam Caddesi', 'Dermatologist', 12,

'Friday-Tuesday', 15),
(16, 'Dr. Amina Akhtar', 'Neurology', '1987-07-15', '888-333-4444',
'amina.akhtar@gmail.com', '1313 Gökner Caddesi', 'Neurologist', 22,
'Saturday-Wednesday', 16),
(17, 'Dr. Youssef Hamdi', 'Cardiology', '1973-11-30', '444-555-1111',
'youssef.hamdi@gmail.com', '1414 Akçe Meydanı', 'Cardiologist', 25,
'Sunday-Thursday', 17),
(18, 'Dr. Mariam Iqbal', 'Pediatrics', '1986-04-25', '666-222-3333',
'mariam.iqbal@gmail.com', '1515 Ceviz Sokak', 'Pediatrician', 15, 'Monday-Friday',
18),
(19, 'Dr. Bilal Ahmed', 'Orthopedics', '1980-09-12', '111-333-4444',
'bilal.ahmed@gmail.com', '1616 Çam Caddesi', 'Orthopedic Surgeon', 18,
'Tuesday-Saturday', 19),
(20, 'Dr. Khadija Khan', 'Oncology', '1977-02-18', '888-999-0000',
'khadija.khan@gmail.com', '1717 Meşe Sokak', 'Oncologist', 20, 'Wednesday-Sunday',
20);

CREATE TABLE Nurse (

NurseID INT PRIMARY KEY,

FullName VARCHAR(100),

Department VARCHAR(50),

DateOfBirth DATE,

PhoneNumber VARCHAR(15),

EmailAddress VARCHAR(100),

Address VARCHAR(255),

ShiftType VARCHAR(50)

);

INSERT INTO Nurse (NurseID, FullName, Department, DateOfBirth, PhoneNumber,

EmailAddress, Address, ShiftType)

VALUES

(1, 'Nurse Fatma Yılmaz', 'Cardiology', '1985-03-18', '555-111-2222',
'fatma.yilmaz@gmail.com', '123 Ana Cadde', 'Day Shift'),
(2, 'Nurse Mo Salah', 'Pediatrics', '1982-06-25', '333-888-9999',
'mo.salah@gmail.com', '456 Elm Sokağı', 'Night Shift'),
(3, 'Nurse Mehmet Demir', 'Orthopedics', '1979-09-10', '777-444-5555',
'mehmet.demir@gmail.com', '789 Meşe Sokak', 'Rotating Shift'),
(4, 'Nurse Salim Ateş', 'Oncology', '1988-12-05', '999-666-7777',
'salim.ates@gmail.com', '101 Çam Caddesi', 'Day Shift'),
(5, 'Nurse Cemal Aksoy', 'Dermatology', '1975-02-20', '222-777-8888',
'cemal.aksoy@gmail.com', '202 Sedir Sokak', 'Night Shift'),
(6, 'Nurse Gon Freecs', 'Neurology', '1987-07-15', '888-333-4444',
'gon.yildiz@gmail.com', '303 Gökner Caddesi', 'Rotating Shift'),
(7, 'Nurse Ali Toprak', 'Cardiology', '1973-11-30', '444-555-1111',
'ali.toprak@gmail.com', '404 Akçe Meydanı', 'Day Shift'),
(8, 'Nurse Fatma Beyaz', 'Pediatrics', '1986-04-25', '666-222-3333',
'fatma.beyaz@gmail.com', '505 Ceviz Sokak', 'Night Shift'),
(9, 'Nurse Mustafa Savaş', 'Orthopedics', '1980-09-12', '111-333-4444',
'mustafa.savas@gmail.com', '606 Çam Caddesi', 'Rotating Shift'),
(10, 'Nurse Yasemin Demir', 'Oncology', '1977-02-18', '888-999-0000',
'yasemin.demir@gmail.com', '707 Meşe Sokak', 'Day Shift'),
(11, 'Nurse Selma Yıldırım', 'Cardiology', '1986-08-22', '555-111-2222',
'selma.yildirim@gmail.com', 'İstanbul Caddesi No: 123, Beşiktaş', 'Night Shift'),
(12, 'Nurse Mustafa Arslan', 'Pediatrics', '1980-05-10', '333-888-9999',
'mustafa.arslan@gmail.com', 'Kadıköy Sokak No: 456, Kadıköy', 'Rotating Shift'),
(13, 'Nurse Esra Yılmaz', 'Orthopedics', '1988-11-15', '777-444-5555',
'esra.yilmaz@gmail.com', 'Şişli Caddesi No: 789, Şişli', 'Day Shift'),
(14, 'Nurse Ahmet Başaran', 'Oncology', '1975-04-28', '999-666-7777',
'ahmet.basaran@gmail.com', 'Beyoğlu Sokak No: 101, Beyoğlu', 'Night Shift'),
(15, 'Nurse Elon Musk', 'Dermatology', '1982-02-12', '222-777-8888',

'elon.musk@gmail.com', 'Üsküdar Caddesi No: 202, Üsküdar', 'Rotating Shift'),
(16, 'Nurse Adem Çetin', 'Neurology', '1986-07-30', '888-333-4444',
'adem.cetin@gmail.com', 'Kartal Sokak No: 303, Kartal', 'Day Shift'),
(17, 'Nurse Derya Atalay', 'Cardiology', '1972-12-05', '444-555-1111',
'derya.atalay@gmail.com', 'Fatih Caddesi No: 404, Fatih', 'Night Shift'),
(18, 'Nurse Emine Kaya', 'Pediatrics', '1984-03-20', '666-222-3333',
'emine.kaya@gmail.com', 'Maltepe Sokak No: 505, Maltepe', 'Rotating Shift'),
(19, 'Nurse Mehmet Aktaş', 'Orthopedics', '1979-09-12', '111-333-4444',
'mehmet.aktas@gmail.com', 'Bakırköy Caddesi No: 606, Bakırköy', 'Day Shift'),
(20, 'Nurse Rabia Erdoğan', 'Oncology', '1983-02-18', '888-999-0000',
'rabia.erdogan@gmail.com', 'Ataşehir Sokak No: 707, Ataşehir', 'Night Shift');

CREATE TABLE Patient (

PatientID INT PRIMARY KEY,

DoctorID INT,

NurseID INT,

FullName VARCHAR(100),

DateOfBirth DATE,

SocialSecurityNumber VARCHAR(15),

PhoneNumber VARCHAR(15),

EmailAddress VARCHAR(100),

MedicalHistory VARCHAR(100),

BloodType VARCHAR(5),

ConsentInformation VARCHAR(100),

FinancialInformation VARCHAR(100),

Status VARCHAR(20),

FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID),

FOREIGN KEY (NurseID) REFERENCES Nurse(NurseID)

);

INSERT INTO Patient (PatientID, DoctorID, NurseID, FullName, DateOfBirth,

SocialSecurityNumber, PhoneNumber, EmailAddress, MedicalHistory, BloodType,
ConsentInformation, FinancialInformation, Status)

VALUES

(1, 1, 1, 'John Doe', '1980-01-15', '123-45-6789', '555-123-4567',
'john.doe@gmail.com', 'No significant medical history', 'O+', 'Consented',
'Financially Stable', 'Active'),
(2, 2, 2, 'Jane Smith', '1992-04-22', '987-65-4321', '555-987-6543',
'jane.smith@gmail.com', 'Allergies to penicillin', 'A-', 'Consented', 'Limited
financial means', 'Inactive'),
(3, 3, 3, 'Ahmet Yılmaz', '1985-07-10', '345-67-8901', '555-234-5678',
'ahmet.yilmaz@gmail.com', 'No chronic conditions', 'AB+', 'Consented', 'Financially
Stable', 'Active'),
(4, 4, 4, 'Ayşe Kaya', '1978-12-05', '567-89-0123', '555-345-6789',
'ayse.kaya@gmail.com', 'Hypertension', 'B-', 'Consented', 'Limited financial means',
'Active'),
(5, 5, 5, 'Mehmet Demir', '1990-09-20', '789-01-2345', '555-456-7890',
'mehmet.demir@gmail.com', 'Diabetes', 'O+', 'Consented', 'Financially Stable',
'Inactive'),
(6, 6, 6, 'Zeynep Yıldız', '1982-02-15', '901-23-4567', '555-567-8901',
'zeynep.yildiz@gmail.com', 'No significant medical history', 'A-', 'Consented',
'Limited financial means', 'Active'),
(7, 7, 7, 'Fatma Beyaz', '1975-06-30', '123-45-6789', '555-678-9012',
'fatma.beyaz@gmail.com', 'Asthma', 'AB+', 'Consented', 'Financially Stable',
'Active'),
(8, 8, 8, 'Cemal Aksoy', '1993-11-18', '345-67-8901', '555-789-0123',
'cemal.aksoy@gmail.com', 'No chronic conditions', 'O-', 'Consented', 'Limited
financial means', 'Inactive'),
(9, 9, 9, 'Zehra Güneş', '1988-08-12', '567-89-0123', '555-890-1234',
'zehra.gunes@gmail.com', 'High cholesterol', 'B+', 'Consented', 'Financially

Stable', 'Active'),
(10, 10, 10, 'Ali Toprak', '1980-04-18', '789-01-2345', '555-901-2345',
'ali.toprak@gmail.com', 'No significant medical history', 'AB-', 'Consented',
'Limited financial means', 'Inactive'),
(11, 1, 1, 'Farah Abdullahi', '1986-08-22', '123-45-6789', '555-111-2222',
'farah.abdullahi@gmail.com', 'No chronic conditions', 'O+', 'Consented',
'Financially Stable', 'Active'),
(12, 2, 2, 'Layla Hassan', '1980-05-10', '987-65-4321', '333-888-9999',
'layla.hassan@gmail.com', 'Allergies to peanuts', 'A-', 'Consented', 'Limited
financial means', 'Inactive'),
(13, 3, 3, 'Abdul Rahman Al-Farsi', '1988-11-15', '345-67-8901', '777-444-5555',
'abdul.rahman@gmail.com', 'Hypertension', 'AB+', 'Consented', 'Financially Stable',
'Active'),
(14, 4, 4, 'Leo Messi', '1975-04-28', '567-89-0123', '999-666-7777',
'leo.messi@gmail.com', 'Diabetes', 'B-', 'Consented', 'Limited financial means',
'Active'),
(15, 5, 5, 'Ahmed Jamal', '1990-09-20', '789-01-2345', '222-777-8888',
'ahmed.jamal@gmail.com', 'Asthma', 'O+', 'Consented', 'Financially Stable',
'Inactive'),
(16, 6, 6, 'Zahra Mohamed', '1982-02-15', '901-23-4567', '888-333-4444',
'zahra.mohamed@gmail.com', 'No significant medical history', 'A-', 'Consented',
'Limited financial means', 'Active'),
(17, 7, 7, 'Ali Hamdi', '1973-11-30', '123-45-6789', '444-555-1111',
'ali.hamdi@gmail.com', 'High cholesterol', 'AB+', 'Consented', 'Financially Stable',
'Active'),
(18, 8, 8, 'Fatima Ali', '1993-11-18', '345-67-8901', '666-222-3333',
'fatima.ali@gmail.com', 'Allergies to penicillin', 'O-', 'Consented', 'Limited
financial means', 'Inactive'),
(19, 9, 9, 'Mohamed Ibrahim', '1988-08-12', '567-89-0123', '111-333-4444',

'mohamed.ibrahim@gmail.com', 'No chronic conditions', 'B+', 'Consented',
'Financially Stable', 'Active'),
(20, 10, 10, 'Layla Ahmed', '1980-04-18', '789-01-2345', '888-999-0000',
'layla.ahmed@gmail.com', 'No significant medical history', 'AB-', 'Consented',
'Limited financial means', 'Inactive');

CREATE TABLE Manager (

ID INT PRIMARY KEY,

FullName VARCHAR(100),

DoctorID INT,

NurseID INT,

AppointmentID INT,

AppointmentFor VARCHAR(100),

AppointmentType VARCHAR(50),

AppointmentTime DATETIME,

Status VARCHAR(20),

FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID),

FOREIGN KEY (NurseID) REFERENCES Nurse(NurseID)

);

INSERT INTO Manager (ID, FullName, DoctorID, NurseID, AppointmentID, AppointmentFor,
AppointmentType, AppointmentTime, Status)

VALUES

(1, 'Manager Alexander Schmidt', 1, 1, 101, 'Patrick Doe', 'General Checkup',
'2023-11-03 10:00:00', 'Scheduled'),

(2, 'Manager Sophia Müller', 2, 2, 102, 'eve Smith', 'Pediatric Consultation',
'2023-11-04 14:30:00', 'Completed'),

(3, 'Manager Luca Fischer', 3, 3, 103, 'Ahmet Alexander', 'Orthopedic
Evaluation', '2023-11-05 11:45:00', 'Scheduled'),

(4, 'Manager Aisha Wagner', 4, 4, 104, 'Yunis Axel', 'Oncology Follow-up',
'2023-11-06 09:15:00', 'Completed'),

(5, 'Manager Liam Hoffmann', 5, 5, 105, 'Mehmet can', 'Dermatology Appointment',
'2023-11-07 13:00:00', 'Scheduled'),

(6, 'Manager Emma Becker', 6, 6, 106, 'Zeynep husein', 'Neurology Consultation',
'2023-11-08 15:30:00', 'Completed'),

(7, 'Manager Sophie Keller', 7, 7, 107, 'Ali Mohamed', 'Cardiology
Consultation', '2023-11-09 09:45:00', 'Scheduled'),

(8, 'Manager Finn Wagner', 8, 8, 108, 'Omar Abu bakar', 'Pediatrics Follow-up',
'2023-11-10 14:00:00', 'Completed'),

(9, 'Manager Mia Braun', 9, 9, 109, 'Adam Nuh', 'Orthopedic Appointment',
'2023-11-11 10:30:00', 'Scheduled'),

(10, 'Manager Noah Schulz', 10, 10, 110, 'Ali Hamdi', 'Dermatology
Consultation', '2023-11-12 16:15:00', 'Completed'),

(11, 'Manager Emma Mayer', 1, 1, 111, 'Abdullahi Farah', 'General Checkup',
'2023-11-13 11:00:00', 'Scheduled'),

(12, 'Manager Liam Richter', 2, 2, 112, 'Hassan Abdi', 'Pediatric Consultation',
'2023-11-14 13:45:00', 'Completed'),

(13, 'Manager Zoe Lehmann', 3, 3, 113, 'Rahman Al-Farsi', 'Orthopedic
Evaluation', '2023-11-15 12:30:00', 'Scheduled'),

(14, 'Manager Felix Klein', 4, 4, 114, 'Naruto', 'Oncology Follow-up',
'2023-11-16 10:15:00', 'Completed'),

(15, 'Manager Emilia Lange', 5, 5, 115, 'Jamal', 'Dermatology Appointment',
'2023-11-17 14:45:00', 'Scheduled'),

(16, 'Manager Elias Wolf', 6, 6, 116, 'Zahra Ali', 'Neurology Consultation',
'2023-11-18 16:30:00', 'Completed'),

(17, 'Manager Clara Hofmann', 9, 9, 117, 'Musa Ibrahim', 'Orthopedic
Evaluation', '2023-11-19 11:45:00', 'Scheduled'),

(18, 'Manager Leonie Mayer', 10, 10, 118, 'David Ahmed', 'Dermatology
Consultation', '2023-11-20 09:30:00', 'Completed'),

(19, 'Manager Matteo Vogel', 1, 1, 119, 'Joe Doe', 'General Checkup',

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'2023-11-21 14:15:00', 'Scheduled'),
(20, 'Manager Valentina Becker', 2, 2, 120, 'Will Smith', 'Pediatric
Consultation', '2023-11-22 13:00:00', 'Completed');
CREATE TRIGGER trg_after_insert_doctor
AFTER INSERT ON Doctor
FOR EACH ROW
INSERT INTO AuditTable (TableName, ActionDescription)
VALUES ('Doctor', CONCAT('Inserted Doctor with ID ', NEW.DoctorID));
CREATE TRIGGER trg_after_insert_nurse
AFTER INSERT ON Nurse
FOR EACH ROW
INSERT INTO AuditTable (TableName, ActionDescription)
VALUES ('Nurse', CONCAT('Inserted Nurse with ID ', NEW.NurseID));
CREATE TRIGGER trg_after_insert_patient
AFTER INSERT ON Patient
FOR EACH ROW
INSERT INTO AuditTable (TableName, ActionDescription)
VALUES ('Patient', CONCAT('Inserted Patient with ID ', NEW.PatientID));
ALTER TABLE Manager
ADD COLUMN FullNameAndType VARCHAR(150) GENERATED ALWAYS AS (CONCAT(FullName, ' - ',
AppointmentType)) VIRTUAL;
ALTER TABLE Patient
ADD COLUMN FullNameAndStatus VARCHAR(150) GENERATED ALWAYS AS (CONCAT(FullName, ' -
', Status)) VIRTUAL;
SELECT
P.FullName AS PatientName, P.DateOfBirth AS PatientDOB, P.MedicalHistory,
P.Status AS PatientStatus, D.FullName AS DoctorName, D.Specialization,
N.FullName AS NurseName, N.ShiftType
FROM

```

Patient P INNER JOIN

Doctor D ON P.DoctorID = D.DoctorID

INNER JOIN

Nurse N ON P.NurseID = N.NurseID

WHERE

(D.Department = 'Cardiology' OR N.ShiftType = 'Night Shift')

AND P.Status = 'Active';

SELECT

P.FullName AS PatientName,

P.DateOfBirth AS PatientDOB,

P.MedicalHistory,

P.Status AS PatientStatus,

D.FullName AS DoctorName,

D.Specialization,

N.FullName AS NurseName,

N.ShiftType

FROM

Patient P

INNER JOIN

Doctor D ON P.DoctorID = D.DoctorID

INNER JOIN

Nurse N ON P.NurseID = N.NurseID

WHERE

P.MedicalHistory LIKE '%Diabetes%'

AND D.YearsOfExperience > 15

AND P.Status = 'Active';

SELECT SUM(YearsOfExperience) AS TotalExperience FROM DOCTOR;

SELECT COUNT(*) FROM DOCTOR;

```

SELECT MAX(YearsOfExperience) FROM DOCTOR;
SELECT MIN(YearsOfExperience) FROM DOCTOR;
SELECT MAX(DateOfBirth) AS LatestDateOfBirth FROM DOCTOR;
SELECT MIN(DateOfBirth) AS EarliestDateOfBirth FROM DOCTOR;
SELECT AVG(YearsOfExperience) AS AverageExperience FROM DOCTOR;
SELECT SUM(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS TotalExperience FROM NURSE;
SELECT COUNT(*) AS TotalNurses FROM NURSE;
SELECT MAX(DateOfBirth) AS LatestDateOfBirth FROM NURSE;
SELECT MIN(DateOfBirth) AS EarliestDateOfBirth FROM NURSE;
SELECT MIN(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS MinExperience FROM NURSE;
SELECT MAX(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS MaxExperience FROM NURSE;
SELECT AVG(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS AverageExperience FROM NURSE;
SELECT SUM(SocialSecurityNumber) AS TotalSSNSum FROM PATIENT;
SELECT COUNT(*) AS TotalPatients FROM PATIENT;
SELECT COUNT(*) AS ActivePatients FROM PATIENT WHERE Status = 'Active';
SELECT COUNT(*) AS InactivePatients FROM PATIENT WHERE Status = 'Inactive';
SELECT MAX(DateOfBirth) AS LatestDateOfBirth FROM PATIENT;
SELECT MIN(DateOfBirth) AS EarliestDateOfBirth FROM PATIENT;
SELECT MAX(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS MaxAge FROM PATIENT;
SELECT MIN(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS MinAge FROM PATIENT;
SELECT MIN(ConsentInformation) AS EarliestConsentDate FROM PATIENT WHERE
ConsentInformation IS NOT NULL;
SELECT AVG(YEAR(CURDATE()) - YEAR(DateOfBirth)) AS AverageAge FROM PATIENT;
SELECT SUM(DoctorID) AS TotalDoctorID FROM MANAGER;
SELECT COUNT(*) AS CompletedCount FROM MANAGER WHERE Status = 'Completed';
SELECT COUNT(*) AS ScheduledCount FROM MANAGER WHERE Status = 'Scheduled';
SELECT COUNT(*) AS TotalAppointments FROM MANAGER;
SELECT MIN(AppointmentTime) AS MinAppointmentTime FROM MANAGER;
SELECT MAX(AppointmentTime) AS MaxAppointmentTime FROM MANAGER;

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```
SELECT AVG(AppointmentTime) AS AverageAppointmentTime FROM MANAGER;

SELECT * FROM Patient WHERE FullName LIKE 'O%';

SELECT * FROM Doctor WHERE FullName LIKE 'Dr.%';

SELECT * FROM Nurse WHERE Department IN ('Pediatrics', 'Cardiology');

SELECT * FROM Manager WHERE DoctorID IN (SELECT DoctorID FROM Doctor WHERE DoctorID
BETWEEN 5 AND 10);

SELECT Patient.PatientID, Patient.FullName AS PatientName
FROM Patient
LEFT JOIN Doctor ON Patient.DoctorID = Doctor.DoctorID
WHERE Doctor.DoctorID IS NULL;

SELECT Department, AVG(CAST(YearsOfExperience AS DECIMAL(10, 2))) AS AvgExperience
FROM Doctor
GROUP BY Department
HAVING AVG(CAST(YearsOfExperience AS DECIMAL(10, 2))) > 10
ORDER BY AvgExperience DESC;

SELECT Department, COUNT(*) AS DoctorCount
FROM Doctor
GROUP BY Department
HAVING AVG(YearsOfExperience) > 10
ORDER BY DoctorCount DESC;

ALTER TABLE Doctor ADD COLUMN BirthPlace VARCHAR(100);

UPDATE Doctor SET BirthPlace = 'Unknown' WHERE DoctorID = 1;

SELECT DoctorID, FullName, BirthPlace FROM Doctor WHERE DoctorID = 1;

SELECT NurseID, FullName, PhoneNumber FROM Nurse WHERE NurseID = 1;

ALTER TABLE Doctor ADD CONSTRAINT UniqueEmail UNIQUE (EmailAddress);

UPDATE Doctor
SET EmailAddress = 'unique_email@example.com'
WHERE DoctorID = 1;

ALTER TABLE Patient DROP COLUMN FinancialInformation;
```

```

SELECT * FROM Patient WHERE PatientID = 1;

CREATE TABLE Hospital (
    ID INT AUTO_INCREMENT PRIMARY KEY,
    Name VARCHAR(100),
    Location VARCHAR(100)
);

INSERT INTO Hospital (Name, Location) VALUES ('Test Hospital', 'Test Location');

SELECT * FROM Hospital WHERE ID IS NOT NULL;

ALTER TABLE Nurse MODIFY COLUMN ShiftType VARCHAR(255) DEFAULT 'Day Shift';

SELECT * FROM Nurse WHERE NurseID = 21;

SELECT CONCAT(FullName, ' - ', Department) AS DoctorInfo FROM Doctor;

UPDATE Nurse SET ShiftType = 'Fixed Day Shift' WHERE NurseID = 1;

DELETE FROM Patient WHERE PatientID = 2;

ALTER table patient change EmailAddress Email varchar(100);

SELECT p.PatientID AS PatientID, p.FullName AS PatientName, p.DateOfBirth AS
PatientDOB, p.PhoneNumber AS PatientContact, p.Status AS PatientStatus, d.DoctorID
AS DoctorID, d.FullName AS DoctorName, d.Specialization AS DoctorSpecialization
FROM Patient p
INNER JOIN Doctor d ON p.DoctorID = d.DoctorID;

SELECT p.PatientID AS PatientID, p.FullName AS PatientName, p.DateOfBirth AS
PatientDOB, p.PhoneNumber AS PatientContact, p.Status AS PatientStatus, d.DoctorID
AS DoctorID, d.FullName AS DoctorName, d.Specialization AS DoctorSpecialization
FROM Patient p
LEFT JOIN Doctor d ON p.DoctorID = d.DoctorID;

SELECT
    Patient.PatientID AS PatientID,
    Patient.FullName AS PatientName,
    Patient.DateOfBirth AS PatientDOB,
    Nurse.NurseID AS NurseID,

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```
Nurse.FullName AS NurseName,  
Nurse.Department AS NurseDepartment  
FROM  
Patient  
RIGHT JOIN  
Nurse  
ON  
Patient.NurseID = Nurse.NurseID;  
SELECT  
Patient.PatientID AS patientID,  
Patient.FullName AS PatientName,  
Patient.DateOfBirth AS PatientDOB,  
Patient.PhoneNumber AS PatientContact,  
Patient.Status AS PatientStatus,  
Doctor.DoctorID AS DoctorID,  
Doctor.FullName AS DoctorName,  
Doctor.Specialization AS DoctorSpecialization  
FROM  
Patient  
CROSS JOIN  
Doctor;
```