

### Exercise on View

Create a database to store the details of a **Hospital** with the following tables:

**Doctor Table:**

Doctor_id	Name	Specialisation	Phone
1	Dr. John Doe	Cardiology	021-222-1234
2	Dr. Sarah Smith	Neurology	021-222-2345
3	Dr. James Brown	Pediatrics	021-222-3456
4	Dr. Lisa White	Orthopedics	021-222-4567
5	Dr. Michael Black	Dermatology	021-222-5678
6	Dr. Emily Green	General	021-222-6789
7	Dr. Daniel Lee	Cardiology	021-222-7890
8	Dr. Linda Clark	Neurology	021-222-8901
9	Dr. Steven Turner	Pediatrics	021-222-9012
10	Dr. Jessica Martinez	Orthopedics	021-222-0123

**Patient Table:**

Patient_id	Name	Birth_date	Gender	Address
1	Alice Johnson	1985-05-12	Female	123 Elm St
2	Bob Miller	1990-02-23	Male	456 Oak St
3	Charlie Davis	2001-07-30	Male	789 Pine St
4	Diana Wilson	1975-09-14	Female	101 Maple St
5	Eve Moore	1982-04-19	Female	202 Birch St
6	Frank Harris	1995-01-08	Male	303 Cedar St
7	Grace Clark	1989-12-25	Female	404 Pine St
8	Henry Lewis	2000-03-14	Male	505 Maple St
9	Irene Robinson	1983-06-22	Female	606 Oak St
10	Jack Walker	1998-11-01	Male	707 Birch St

**Appointment Table:**

Appointment_id	Patient_id	Doctor_id	Appointment_date	Status
1	1	2	2025-04-10	Scheduled
2	2	1	2025-04-15	Scheduled
3	3	5	2025-04-12	Scheduled
4	4	3	2025-04-20	Scheduled

5	5	2	2025-04-18	Scheduled
6	6	4	2025-04-25	Scheduled
7	7	6	2025-04-17	Scheduled
8	8	7	2025-04-22	Scheduled
9	9	8	2025-04-14	Scheduled
10	10	9	2025-04-24	Scheduled

**Treatment Table:**

Treatment_id	Appointment_id	Description	Cost
1	1	X-ray	150.00
2	2	MRI	300.00
3	3	Blood Test	100.00
4	4	Physical Therapy	200.00
5	5	Medication	50.00
6	6	Surgery	800.00
7	7	MRI	300.00
8	8	X-ray	150.00
9	9	Blood Test	100.00
10	10	Physical Therapy	200.00

**Prescription Table:**

Prescription_id	Appointment_id	Medicine	Dosage
1	1	Paracetamol	1 tablet twice a day
2	2	Ibuprofen	2 tablets daily
3	3	Amoxicillin	1 capsule thrice a day
4	4	Metformin	1 tablet after meals
5	5	Lisinopril	1 tablet daily
6	6	Amlodipine	1 tablet daily
7	7	Paracetamol	1 tablet twice a day
8	8	Ibuprofen	2 tablets daily
9	9	Amoxicillin	1 capsule thrice a day
10	10	Metformin	1 tablet after meals

Create views for each of the following questions:

1. List all doctors.
2. List all patients who are female.
3. Get all appointments for patient with `patient\_id` = 3.
4. List all treatments with their costs.
5. Get the total cost of treatments for patient with `patient\_id` = 2.
6. Get the details of doctors who specialize in "Cardiology".
7. List appointments scheduled after `2025-04-15`.
8. Find the most recent appointment for patient `1`.
9. List all patients who have a scheduled appointment with a doctor specializing in "Neurology".
10. Get all treatments that cost more than `200`.
11. List all doctors with their total number of appointments.
12. Get the most commonly prescribed medication.
13. Find all patients who were born before `1990-01-01`.
14. List all prescriptions for the appointment with `appointment\_id` = 6.
15. Find the average cost of treatments per appointment.
16. Get all patients who have been prescribed "Ibuprofen".
17. List all treatments and the patients they were given to.
18. Get the total number of treatments provided.
19. Get the names of doctors who have treated patient `1`.
20. Get the total number of appointments for each doctor.