*Basic and Complex SQL Queries:*

1. Retrieve the names and ages of all patients admitted to the hospital.

SELECT p.name, p.age

FROM Patient pa, Person p

where pa.person\_id = p.person\_id;

2. Get the names and roles of all staff members (doctors and nurses).

SELECT p.name, s.role

FROM Staff s,Person p

where s.person\_id = p.person\_id;

3. Find the total count of patients admitted to each room type.

SELECT r.type, COUNT(a.patient\_id) AS patient\_count

FROM Admittance a,Rooms r

where a.room\_id = r.room\_id

GROUP BY r.type;

4. Retrieve the names and department of all doctors in the hospital.

SELECT p.name, d.department

FROM Doctor d

JOIN Staff s ON d.staff\_id = s.staff\_id

JOIN Person p ON s.person\_id = p.person\_id;

5. Find the names of nurses who work night shifts.

SELECT p.name

FROM Nurse n

JOIN Staff s ON n.staff\_id = s.staff\_id

JOIN Person p ON s.person\_id = p.person\_id

WHERE n.shift = 'Night';

6. Get the names of patients who have undergone a surgery.

SELECT p.name

FROM Operation o

JOIN Patient pa ON o.patient\_id = pa.patient\_id

JOIN Person p ON pa.person\_id = p.person\_id;

7. Get the total number of operations performed on each surgery type.

SELECT s.surgery\_name, COUNT(o.operation\_id) AS total\_operations

FROM Operation o

JOIN Surgeries s ON o.surgery\_id = s.surgery\_id

GROUP BY s.surgery\_name;

8. Retrieve the names of doctors who have performed surgeries.

SELECT p.name

FROM Operation o

JOIN Doctor d ON o.doctor\_id = d.doctor\_id

JOIN Staff s ON d.staff\_id = s.staff\_id

JOIN Person p ON s.person\_id = p.person\_id;

9. Find the names of nurses who are assigned to patients admitted to standard rooms.

SELECT p.name

FROM Nurse n

JOIN Staff s ON n.staff\_id = s.staff\_id

JOIN Person p ON s.person\_id = p.person\_id

JOIN Admittance a ON n.nurse\_id = a.patient\_id

JOIN Rooms r ON a.room\_id = r.room\_id

WHERE r.type = 'Standard';

10. Retrieve the names of patients who have not undergone any surgery.

SELECT p.name

FROM Patient pa

JOIN Person p ON pa.person\_id = p.person\_id

LEFT JOIN Operation o ON pa.patient\_id = o.patient\_id

WHERE o.operation\_id IS NULL;