

DAY 2 – SQL Filtering & Conditions

1. WHERE Clause

The WHERE clause filters rows based on a condition.

Example:

```
SELECT * FROM patients WHERE age > 50;
```

2. Logical Operators — AND, OR, NOT

AND example:

```
SELECT * FROM patients WHERE gender = 'M' AND age > 40;
```

OR example:

```
SELECT * FROM patients WHERE disease = 'Fever' OR disease = 'Cold';
```

NOT example:

```
SELECT * FROM patients WHERE NOT is_discharged;
```

3. Comparison Operators

=, !=, >, <, >=, <=, BETWEEN, IN

Example:

```
SELECT * FROM patients WHERE age BETWEEN 30 AND 60;
```

```
SELECT * FROM patients WHERE disease IN ('Cold', 'Fever', 'Dengue');
```

4. LIKE Operator – Pattern Matching

Patterns: 'A%', '%a', '%a%', 'a____', 'a___%'

Example:

```
SELECT * FROM patients WHERE name LIKE 'A%';
```

5. Practice Queries

```
SELECT * FROM patients WHERE age > 50;  
SELECT * FROM patients WHERE gender = 'F';  
SELECT * FROM patients WHERE disease LIKE '%e%';
```

6. Mini Project – Appointments Table

```
CREATE TABLE appointments(
```

```
patients_name VARCHAR(30),
```

```
patient_id INT,
```

```
age INT,
```

```
doctor_name VARCHAR(30),
```

```
appointment_date DATE,
```

```
appointment_fee INT
```

```
);
```

```
INSERT INTO appointments VALUES  
('Radha', 11, 23, 'Saguna', '2025-02-25', 500),  
('Rahul', 22, 34, 'Smithi', '2025-01-10', 300),  
('Rohan', 33, 45, 'Dr. Sharma', '2024-09-24', 600);
```

Queries:

```
SELECT * FROM appointments WHERE appointment_fee > 500;
```

```
SELECT * FROM appointments WHERE doctor_name = 'Dr. Sharma';
```

```
SELECT * FROM appointments WHERE appointment_date BETWEEN '2025-01-07' AND  
'2025-01-12';
```

DAY 2 Completed Successfully!