Full Notes: Conditions + SELECT + CASE in MySQL

Step 1: Table Create karo — employees

```
CREATE TABLE employees (
  id INT PRIMARY KEY,
  name VARCHAR(50),
  department VARCHAR(50),
  salary INT,
  city VARCHAR(50)
);
```

Step 2: Data Insert karo

```
INSERT INTO employees (id, name, department, salary, city) VALUES
(1, 'Rahul', 'IT', 60000, 'Delhi'),
(2, 'Priya', 'HR', 45000, 'Mumbai'),
(3, 'Aman', 'Finance', 72000, 'Delhi'),
(4, 'Neha', 'IT', 50000, 'Pune'),
(5, 'Ravi', 'HR', 30000, 'Chennai');
```

Step 3: Basic SELECT + WHERE + AND + OR Conditions

Example 1: WHERE with AND

```
SELECT name, department, salary, city
FROM employees
WHERE department = 'IT' AND city = 'Delhi';
```

Output:

name	department	salary	city
Rahul	IT	60000	Delhi

Example 2: WHERE with OR

```
SELECT name, department, salary, city
FROM employees
WHERE city = 'Mumbai' OR city = 'Pune';
```

Output:

name	department	salary	city
Priya	HR	45000	Mumbai

name	department	salary	city
Neha	IT	50000	Pune

Example 3: Complex WHERE with AND + OR

```
SELECT name, department, salary, city
FROM employees
WHERE (department = 'HR' AND salary > 40000) OR city = 'Pune';
```

Output:

name	department	salary	city
Priya	HR	45000	Mumbai
Neha	IT	50000	Pune

Step 4: SELECT + CASE — Salary Status

```
SELECT name, salary,
  CASE
    WHEN salary >= 70000 THEN 'High Salary'
    WHEN salary >= 50000 THEN 'Medium Salary'
    ELSE 'Low Salary'
  END AS salary_status
FROM employees;
```

Output:

name	salary	salary_status
Rahul	60000	Medium Salary
Priya	45000	Low Salary
Aman	72000	High Salary
Neha	50000	Medium Salary
Ravi	30000	Low Salary

Step 5: SELECT + CASE + WHERE + AND + OR Together

Example: Salary status for only IT or HR employees living in Delhi or Mumbai

```
SELECT name, department, city, salary,
  CASE
    WHEN salary >= 70000 THEN 'High Salary'
    WHEN salary >= 50000 THEN 'Medium Salary'
    ELSE 'Low Salary'
  END AS salary_status
FROM employees
WHERE (department = 'IT' OR department = 'HR')
  AND (city = 'Delhi' OR city = 'Mumbai');
```

Output:

name	department	city	salary	salary_status
Rahul	IT	Delhi	60000	Medium Salary
Priya	HR	Mumbai	45000	Low Salary

Summary Table: SQL Conditions + CASE

Clause	Use Case	Example
WHERE	Filter rows based on condition	WHERE salary > 50000
AND	Multiple conditions true simultaneously	WHERE city='Delhi' AND department='IT'
OR	Either condition true	WHERE city='Mumbai' OR city='Pune'
CASE	Create conditional columns	CASE WHEN salary>70000 THEN 'High' ELSE 'Low' END

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