

# **Video-13**

# **Topics to cover:**

- Case Statement in SQL

# # Case Statement

- It's like an IF-THEN-ELSE inside SQL.
- You use it when you want different outputs depending on a condition.
- It checks conditions one by one, and stops at the first match.
- If nothing matches, it gives the ELSE value (or NULL if no ELSE is written).

The CASE statement in MySQL comes in two main forms:

## 1. Simple CASE

- Compares one expression against multiple possible values.
- Works like a switch statement in programming.

## 2. Searched CASE

- Evaluates conditions (logical expressions).
- More flexible because you can use operators like >, <, Between, etc.

### Simple Case

```
CASE expression
    WHEN value1 THEN result1
    WHEN value2 THEN result2
    ...
    ELSE resultN
END
```

### Searched Case

```
CASE
    WHEN condition1 THEN result1
    WHEN condition2 THEN result2
    ...
    ELSE resultN
END
```

## # Creating student table to understand Simple Case:

```
CREATE TABLE employees (
    emp_id INT PRIMARY KEY AUTO_INCREMENT,
    department VARCHAR(10));
```

```
INSERT INTO employees (department)
VALUES
('HR'), ('IT'), ('FIN'), ('SALES'), ('MKT'), ('IT'), ('HR');
```

```
Select * from employees;
```

```
SELECT emp_id, department,
CASE department
    WHEN 'HR' THEN 'Human Resources'
    WHEN 'IT' THEN 'Information Technology'
    WHEN 'FIN' THEN 'Finance'
    ELSE 'Other'
END AS department_full
FROM employees;
```

## # Creating student table to understand Searched Case:

```
CREATE TABLE students (
stu_id INT,
stu_name VARCHAR(20),
marks FLOAT
);
```

```
INSERT INTO students
VALUES (1,"ankit",86), (2,"rahul",58),(3,"amit",95),(4,"rajesh",80),(5,"nitin",65);
```

```
SELECT * FROM students;
```

```
/* Grading:
marks > 90 : grade A+
marks >= 80 and marks <90 so grade will A
marks >= 70 and marks <80 so grade will B+
marks >= 60 and marks <70 so grade will B
marks < 60 so grade will be C */
```

## # Creating student table to understand Searched Case:

```
SELECT *,  
CASE  
    WHEN marks>90 THEN "A+"  
    WHEN marks>=80 AND marks<90 THEN "A"  
    WHEN marks>=70 AND marks <80 THEN "B+"  
    WHEN marks >=60 AND marks <70 THEN "B"  
    ELSE "C"  
END AS grade  
FROM students;
```