

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;
```