



Conditional Statements in MySQL

Instructor: Sriya Ivaturi



Conditional Statements in MySQL

- ❖ Conditional statements control the flow of execution based on conditions.
- ❖ Three main types in MySQL:
 - IF statement
 - IF...ELSEIF...ELSE statement
 - CASE statement

Syntax - IF Statement

```
IF condition THEN  
    -- statements  
END IF;
```

Use Case: Use when you want to execute code only if a condition is true.

Example - IF Statement

```
DELIMITER $$
CREATE PROCEDURE CheckPositive(IN num INT)
BEGIN
    IF num > 0 THEN
        SELECT 'Positive Number' AS Result;
    END IF;
END $$
DELIMITER ;

CALL CheckPositive(5);
```

IF...ELSE Statement

```
IF condition THEN  
    -- statements if true  
ELSE  
    -- statements if false  
END IF;
```

Use Case: Use when you need to handle both true and false outcomes.

Check if a number is even or odd

```
DELIMITER $$
CREATE PROCEDURE CheckEvenOdd(IN num INT)
BEGIN
    IF MOD(num, 2) = 0 THEN
        SELECT 'Even Number' AS Result;
    ELSE
        SELECT 'Odd Number' AS Result;
    END IF;
END $$
DELIMITER ;

CALL CheckEvenOdd(7);
```

IF...ELSEIF...ELSE

```
IF condition1 THEN
  -- code block 1
ELSEIF condition2 THEN
  -- code block 2
ELSE
  -- code block 3
END IF;
```

Use Case: Use when there are multiple conditions to evaluate.

Example - IF...ELSEIF...ELSE -> Categorise Marks

```
DELIMITER $$
CREATE PROCEDURE GradeStudent(IN marks INT)
BEGIN
    IF marks >= 90 THEN
        SELECT 'Grade A' AS Grade;
    ELSEIF marks >= 75 THEN
        SELECT 'Grade B' AS Grade;
    ELSEIF marks >= 60 THEN
        SELECT 'Grade C' AS Grade;
    ELSE
        SELECT 'Fail' AS Grade;
    END IF;
END $$
DELIMITER ;

CALL GradeStudent(78);
```


Syntax - CASE Statement

```
CASE expression
  WHEN value1 THEN statement1
  WHEN value2 THEN statement2
  ...
  ELSE default_statement
END CASE;
```

Use Case: Best for comparing one variable against multiple values.

Example: Day number to name

```
DELIMITER $$
CREATE PROCEDURE DayName (IN dayNum INT)
BEGIN
    CASE dayNum
        WHEN 1 THEN SELECT 'Sunday' AS Day;
        WHEN 2 THEN SELECT 'Monday' AS Day;
        WHEN 3 THEN SELECT 'Tuesday' AS Day;
        ELSE SELECT 'Invalid Day' AS Day;
    END CASE;
END $$
DELIMITER ;

CALL DayName (2);
```

Summary

- ❖ IF – Simple yes/no check
- ❖ IF...ELSEIF...ELSE – Multiple condition paths
- ❖ CASE – Clean alternative to multiple IFs
- ❖ Always use DELIMITER \$\$ and END blocks properly in stored procedures