

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