

WEEK 14

# Use cases for the **Case** **When** statement

PRESENTED BY FILSAN MUSA & FADUMO DIRIYE

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# Using CASE WHEN with Logical & Comparison Operators

- Scenario: Assigning a grade letter based on student scores.
- Explanation: Logical (AND, OR) and comparison operators (<, >, =) define conditions for grade levels.

## SQL Syntax:

```
SELECT student_name, score,  
       CASE WHEN score >= 90 THEN 'Excellent'  
            WHEN score >= 80 THEN 'Good'  
            WHEN score >= 70 THEN 'Average'  
            ELSE 'Below Average'  
       END AS grade_letter  
FROM student_table;
```

# Use Case 2 - Using CASE WHEN with Arithmetic Operators

- **Scenario:** Calculating a price discount based on item quantity.
- **Explanation:** Arithmetic operators (+, -, \*) are used in the THEN clause to compute discounts.

SQL Syntax:

```
SELECT product_name, quantity, price,  
       CASE WHEN quantity >= 3 THEN price * 0.9 -- 10% disc  
           ELSE price  
       END AS discounted_price  
FROM sales_table;
```

# Benefits of Using CASE WHEN

- Enhances code readability by making conditional logic explicit.
- Reduces the need for complex WHERE clauses or multiple IF statements.
- Useful for data cleaning, categorization, and transformation.

# Recap and Next Steps

## Key Takeaways:

- The CASE WHEN statement simplifies SQL query logic.
- Can be used with logical, comparison, and arithmetic operators.
- Helps in various real-world scenarios such as grading and discount calculations.

- Next Steps:
  - Complete Week 14 Quiz