

### Problem Statement 3 (Unnamed Block)

Employee( emp\_id, dept\_id emp\_name, DoJ, salary, commission, job\_title)

Salary\_Increment(emp\_id, new\_salary)

Consider the schema given above. Write a PLSQL Unnamed Block of code to increase the salary of employee

115 based on the following conditions:

Accept emp\_id from user. If experience of employee is more than 10 years, increase salary by 20%. If experience

is greater than 5 years, increase salary by 10% Otherwise 5%. (Hint: Find the years of experience from Date of

Joining (DoJ)). Store the incremented salary in Salary\_Increment table.

Also handle the exception by named exception handler or user defined exception handler.

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### Step 1: Create the Database and Tables

Create Database: Start by creating the database where we will store our tables.

Create Tables: Define Employee and Salary\_Increment tables based on the schema provided.

-- Step 1: Create Database

```
CREATE DATABASE EmployeeDB;  
USE EmployeeDB;
```

-- Step 2: Create Employee Table

```
CREATE TABLE Employee (  
    emp_id INT PRIMARY KEY,  
    dept_id INT,  
    emp_name VARCHAR(50),  
    DoJ DATE,  
    salary DECIMAL(10, 2),  
    commission DECIMAL(10, 2),  
    job_title VARCHAR(50)  
);
```

-- Step 3: Create Salary\_Increment Table

```
CREATE TABLE Salary_Increment (  
    emp_id INT PRIMARY KEY,  
    new_salary DECIMAL(10, 2),  
    FOREIGN KEY (emp_id) REFERENCES Employee(emp_id)  
);
```

### Step 2: Insert Sample Data into Employee Table

Populate the Employee table with some sample data to use for testing.

-- Insert sample data

```
INSERT INTO Employee (emp_id, dept_id, emp_name, DoJ, salary, commission,  
job_title)
```

```
VALUES (115, 2, 'John Doe', '2010-06-15', 50000, 5000, 'Manager'),
       (116, 3, 'Jane Smith', '2018-08-20', 40000, 4000, 'Analyst');
```

Step 3: Write a MySQL Procedure to Perform Salary Increment Based on Experience  
Since MySQL does not support PL/SQL's anonymous blocks directly, we'll create a stored procedure to handle the salary increment and insert the result into the Salary\_Increment table.

```
DELIMITER //
```

```
CREATE PROCEDURE IncrementSalary(IN p_emp_id INT)
BEGIN
    DECLARE v_salary DECIMAL(10, 2);
    DECLARE v_new_salary DECIMAL(10, 2);
    DECLARE v_doj DATE;
    DECLARE v_experience INT;
    DECLARE v_increment_rate DECIMAL(3, 2);

    -- Retrieve employee details and calculate years of experience
    SELECT salary, DoJ INTO v_salary, v_doj
    FROM Employee
    WHERE emp_id = p_emp_id;

    -- Calculate experience in years
    SET v_experience = TIMESTAMPDIFF(YEAR, v_doj, CURDATE());

    -- Determine increment rate based on experience
    IF v_experience > 10 THEN
        SET v_increment_rate = 0.20;
    ELSEIF v_experience > 5 THEN
        SET v_increment_rate = 0.10;
    ELSE
        SET v_increment_rate = 0.05;
    END IF;

    -- Calculate new salary
    SET v_new_salary = v_salary * (1 + v_increment_rate);

    -- Insert or update the new salary in Salary_Increment table
    INSERT INTO Salary_Increment (emp_id, new_salary)
    VALUES (p_emp_id, v_new_salary)
    ON DUPLICATE KEY UPDATE new_salary = v_new_salary;

    -- Display confirmation message
    SELECT CONCAT('Salary incremented successfully for employee ID: ', p_emp_id, '.
    New Salary: ', v_new_salary) AS Result;

END //
```

```
DELIMITER ;
```

Step 4: Execute the Procedure  
To test the procedure, pass an emp\_id as input to IncrementSalary.

```
-- Call the procedure with a specific emp_id
```

```
CALL IncrementSalary(115);
```

Step 5: Verify the Result in Salary\_Increment Table  
To confirm the procedure's effect, query the Salary\_Increment table.

```
-- Check updated salary in the Salary_Increment table
```

```
SELECT * FROM Salary_Increment;
```