**Name – Aaditya M. Patil**

**PRN – 12210643**

**Roll No – 58**

**DBMS ASSIGNMENT – 7**

**Script\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

-- Write and execute all types of database triggers in PL/SQL

-- Create Database

CREATE DATABASE IF NOT EXISTS company\_database;

-- Use the created database

USE company\_database;

-- Drop Trigger If It Exists

DROP TRIGGER IF EXISTS before\_employee\_insert;

-- Create Before Insert Trigger

DELIMITER //

CREATE TRIGGER before\_employee\_insert

BEFORE INSERT ON employees

FOR EACH ROW

BEGIN

    SET NEW.emp\_name = CONCAT('Mr/Ms ', NEW.emp\_name);

END //

DELIMITER ;

-- Drop Trigger If It Exists

DROP TRIGGER IF EXISTS after\_employee\_update;

-- Create After Update Trigger

DELIMITER //

CREATE TRIGGER after\_employee\_update

AFTER UPDATE ON employees

FOR EACH ROW

BEGIN

    INSERT INTO employee\_audit (emp\_id, old\_salary, new\_salary, updated\_at)

    VALUES (OLD.emp\_id, OLD.salary, NEW.salary, NOW());

END //

DELIMITER ;

-- Drop Trigger If It Exists

DROP TRIGGER IF EXISTS before\_employee\_delete;

-- Create Before Delete Trigger

DELIMITER //

CREATE TRIGGER before\_employee\_delete

BEFORE DELETE ON employees

FOR EACH ROW

BEGIN

    INSERT INTO deleted\_employees (emp\_id, emp\_name, deleted\_at)

    VALUES (OLD.emp\_id, OLD.emp\_name, NOW());

END //

DELIMITER ;

-- Create Tables

CREATE TABLE IF NOT EXISTS employees (

    emp\_id INT PRIMARY KEY,

    emp\_name VARCHAR(100),

    salary DECIMAL(10, 2)

);

CREATE TABLE IF NOT EXISTS employee\_audit (

    audit\_id INT AUTO\_INCREMENT PRIMARY KEY,

    emp\_id INT,

    old\_salary DECIMAL(10, 2),

    new\_salary DECIMAL(10, 2),

    updated\_at TIMESTAMP

);

CREATE TABLE IF NOT EXISTS deleted\_employees (

    deleted\_id INT AUTO\_INCREMENT PRIMARY KEY,

    emp\_id INT,

    emp\_name VARCHAR(100),

    deleted\_at TIMESTAMP

);

-- Insert Sample Data

INSERT INTO employees (emp\_id, emp\_name, salary) VALUES

(1, 'John Doe', 60000),

(2, 'Jane Smith', 55000),

(3, 'Bob Johnson', 70000),

(4, 'Alice Williams', 62000),

(5, 'Charlie Brown', 68000);

-- Execute Triggers (Insert)

INSERT INTO employees (emp\_id, emp\_name, salary) VALUES (6, 'New Employee', 75000);

-- Execute Triggers (Update)

UPDATE employees SET salary = 65000 WHERE emp\_id = 6;

-- Execute Triggers (Delete)

DELETE FROM employees WHERE emp\_id = 6;

-- Show Updated Tables

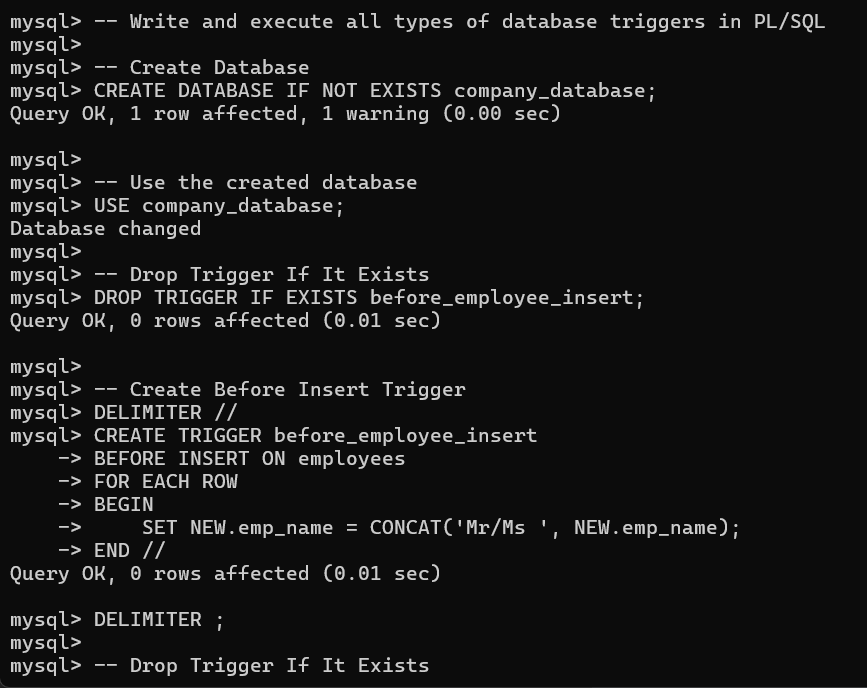
SELECT \* FROM employees;

SELECT \* FROM employee\_audit;

SELECT \* FROM deleted\_employees;

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**CONSOLE LOGS (OUTPUT):**

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