

**/\*Practical No : 06  
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**-- PRACTICAL: CREATE A DATABASE AND TRIGGER TO DISPLAY SALARY  
CHANGES BEFORE UPDATE**

-- Step 1: Create the database  
**CREATE DATABASE cust\_tri;**

-- Step 2: Use the created database  
**USE cust\_tri;**

-- Step 3: Create the table 'customers'  
**CREATE TABLE customers (  
    ID INT PRIMARY KEY,  
    NAME VARCHAR(20),  
    AGE INT,  
    ADDRESS VARCHAR(50),  
    SALARY INT  
);**

-- Step 4: Insert sample data into 'customers' table  
**INSERT INTO customers VALUES  
    (1, "Ramesh", 32, "Ahmedabad", 2000),  
    (2, "Khilan", 25, "Delhi", 1500),  
    (3, "Kaushik", 23, "Kota", 2000),  
    (4, "Chaitali", 25, "Mumbai", 6500),  
    (5, "Hardik", 27, "Bholan", 8500),  
    (6, "Komal", 22, "MP", 4500);**

-- Step 5: Create a trigger for before any update on 'customers'  
**DELIMITER \$\$**

**CREATE TRIGGER display\_salary\_changes  
BEFORE UPDATE ON customers  
FOR EACH ROW  
BEGIN**

**DECLARE sal\_diff INT;**

**-- Calculate salary difference**

**SET sal\_diff = NEW.SALARY - OLD.SALARY;**

**-- Display the old and new salary, and the difference**

**SELECT CONCAT('Old salary: ', OLD.SALARY) AS old\_salary;**

**SELECT CONCAT('New salary: ', NEW.SALARY) AS new\_salary;**

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SELECT CONCAT('Salary difference: ', sal_diff) AS salary_difference;
END $$
```

**DELIMITER ;**

-- Step 6: Update an existing row in 'customers' to trigger the update

**UPDATE customers SET SALARY = 5000 WHERE ID = 1;**

-- Step 7: Select all records from the 'customers' table to view final data

**SELECT \* FROM customers;**

-- Expected Output:

-- When updating the salary of customer with ID = 1, the trigger should display:

-- Old salary: 2000

-- New salary: 5000

-- Salary difference: 3000

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+---+-----+-----+-----+-----+
| ID | NAME   | AGE | ADDRESS | SALARY |
+---+-----+-----+-----+-----+
| 1  | Ramesh | 32  | Ahmedabad | 5000 |
| 2  | Khilan | 25  | Delhi    | 1500 |
| 3  | Kaushik | 23  | Kota     | 2000 |
| 4  | Chaitali | 25  | Mumbai   | 6500 |
| 5  | Hardik | 27  | Bholan   | 8500 |
| 6  | Komal  | 22  | MP       | 4500 |
| 7  | Kriti  | 22  | HP       | 7500 |
+---+-----+-----+-----+-----+
```

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