QUESTION 4

Create a row level trigger for the customers table that would fire for INSERT or UPDATE or DELETE operations performed on the CUSTOMERS table. This trigger will display the salary difference between the old & new Salary.

**CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)**

**Solution:-**

**1. Create the CUSTOMERS Table**

CREATE TABLE CUSTOMERS (

ID INT PRIMARY KEY AUTO\_INCREMENT,

NAME VARCHAR (255),

AGE INT,

ADDRESS VARCHAR (255),

SALARY DECIMAL (10, 2)

);

**2. Create Trigger for INSERT Operation**

DELIMITER //

CREATE TRIGGER after\_insert\_salary\_difference

AFTER INSERT ON CUSTOMERS

FOR EACH ROW

BEGIN

SET @my\_sal\_diff = CONCAT('salary inserted is ', NEW.SALARY);

END;//

DELIMITER ;

**3. Create Trigger for UPDATE Operation**

DELIMITER //

CREATE TRIGGER after\_update\_salary\_difference

AFTER UPDATE ON CUSTOMERS

FOR EACH ROW

BEGIN

DECLARE old\_salary DECIMAL(10, 2);

DECLARE new\_salary DECIMAL(10, 2);

SET old\_salary = OLD.SALARY;

SET new\_salary = NEW.SALARY;

SET @my\_sal\_diff = CONCAT('salary difference after update is ', NEW.SALARY - OLD.SALARY);

END;//

DELIMITER ;

**4. Create Trigger for DELETE Operation**

DELIMITER //

CREATE TRIGGER after\_delete\_salary\_difference

AFTER DELETE ON CUSTOMERS

FOR EACH ROW

BEGIN

SET @my\_sal\_diff = CONCAT('salary deleted is ', OLD.SALARY);

END;//

DELIMITER ;

**5. Testing the Trigger:**

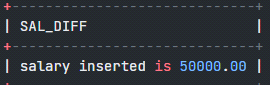
**[execute below two queries together]**

INSERT INTO CUSTOMERS (NAME, AGE, ADDRESS, SALARY)

VALUES ('Shankara', 35, '123 Main St', 50000.00);

SELECT @my\_sal\_diff AS SAL\_DIFF;

O/P:



**[execute below two queries together]**

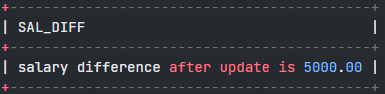
UPDATE CUSTOMERS

SET SALARY = 55000.00

WHERE ID = 1;

SELECT @my\_sal\_diff AS SAL\_DIFF;

O/P:



**[execute below two queries together]**

DELETE FROM CUSTOMERS

WHERE ID = 1;

SELECT @my\_sal\_diff AS SAL\_DIFF;

O/P:

