

Lab 12

Ques1: 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 values and new values.

SQL Worksheet

```
1 CREATE TABLE customers (  
2     id NUMBER(10),  
3     name VARCHAR2(50),  
4     age NUMBER(3),  
5     address VARCHAR2(100),  
6     salary NUMBER(10,2)  
7 );  
8
```

SQL Worksheet

Clear Find Actions Save

```
1 CREATE OR REPLACE TRIGGER salary_trigger  
2 AFTER INSERT OR UPDATE OR DELETE ON customers  
3 FOR EACH ROW  
4 DECLARE  
5     old_salary NUMBER;  
6     new_salary NUMBER;  
7 BEGIN  
8     IF inserting THEN  
9         dbms_output.put_line('New salary: ' || :new.salary);  
10    ELSIF updating THEN  
11        old_salary := :old.salary;  
12        new_salary := :new.salary;  
13        dbms_output.put_line('Salary changed from ' || old_salary || ' to ' || new_salary);  
14    ELSIF deleting THEN  
15        dbms_output.put_line('Salary before deleting: ' || :old.salary);  
16    END IF;  
17 END;
```

Trigger created.

```
1 SELECT DBMS_METADATA.GET_DDL('TRIGGER', 'SALARY_DIFF_TRIGGER') AS trigger_definition  
2 FROM DUAL;
```

```
CREATE OR REPLACE EDITIONABLE TRIGGER "SQL_NAINAKBFTVMZVUXTNYKTDJPX"."SALARY_DIFF_TRIGGER"  
AFTER INSERT OR UPDATE OR DELETE ON customer  
FOR EACH ROW  
DECLARE  
    old_salary NUMBER;  
    new_salary NUMBER;  
BEGIN  
    IF INSERTING OR UPDATING THEN  
        old_salary := NVL(:OLD.salary, 0);  
        new_salary := NVL(:NEW.salary, 0);  
    ELSE  
        old_salary := NVL(:OLD.salary, 0);  
        new_salary := 0;  
    END IF;  
  
    DBMS_OUTPUT.PUT_LINE('Salary difference: ' || (new_salary - old_salary));  
END;  
ALTER TRIGGER "SQL_NAINAKBFTVMZVUXTNYKTDJPX"."SALARY_DIFF_TRIGGER" ENABLE
```