Experiment 16: To understand the concepts of Trigger.

Objective: Students will be able to implement the concept of trigger.

1. **Using implicit cursor update the salary by an increase of 10% for all the records in EMPLOYEES table, and finally display how many records have been updated. If no records exist display the message "No Change".**
   Creating STUDENT Table:

```sql
1    CREATE TABLE STUDENT (
2        ID NUMBER PRIMARY KEY,
3        NAME VARCHAR2(50),
4        AGE NUMBER,
5        ADDRESS VARCHAR2(100),
6        SALARY NUMBER(10, 2)
7    );
```

Results   Explain   Describe   Saved

Table created.

0.05 seconds

   INPUT:

```sql
1    CREATE OR REPLACE TRIGGER Salary_Diff_Trigger
2    AFTER INSERT OR UPDATE OR DELETE
3    ON STUDENT
4    FOR EACH ROW
5    DECLARE
6        v_diff NUMBER;
7    BEGIN
8        -- Handle UPDATE operation
9        IF UPDATING THEN
10           v_diff := :NEW.SALARY - :OLD.SALARY;
11           DBMS_OUTPUT.PUT_LINE('UPDATE operation: Salary changed from ' || :OLD.SALARY || ' to ' || :NEW.SALARY || ' (Difference: ' || v_diff || ').');
12       END IF;
13
14       -- Handle INSERT operation
15       IF INSERTING THEN
16           DBMS_OUTPUT.PUT_LINE('INSERT operation: New Salary is ' || :NEW.SALARY || '.');
17       END IF;
18
19       -- Handle DELETE operation
20       IF DELETING THEN
21           DBMS_OUTPUT.PUT_LINE('DELETE operation: Old Salary was ' || :OLD.SALARY || '.');
22       END IF;
23   END;
24   /
```

Results   Explain   Describe   Saved SQL   History

Trigger created.
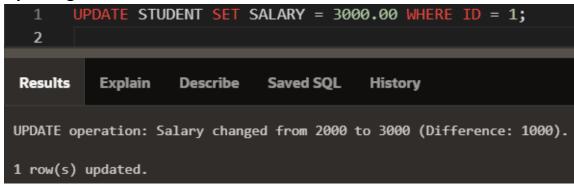
OUTPUT:

Inserting:

```
1    INSERT INTO STUDENT VALUES (7, 'Nikhil', 30, 'Pune', 5000.00);
2
```

Results   Explain   Describe   Saved SQL   History

```
INSERT operation: New Salary is 5000.

1 row(s) inserted.
```

Updating:

```
1    UPDATE STUDENT SET SALARY = 3000.00 WHERE ID = 1;
2
```

Results   Explain   Describe   Saved SQL   History

```
UPDATE operation: Salary changed from 2000 to 3000 (Difference: 1000).

1 row(s) updated.
```

Deleting:

```
1    DELETE FROM STUDENT WHERE ID = 2;
2
```

Results   Explain   Describe   Saved SQL   His

```
DELETE operation: Old Salary was 1500.

1 row(s) deleted.
```