



**University of Petroleum
&
Energy Studies
SCHOOL OF COMPUTER SCIENCE**

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BATCH: 1

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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:

```
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:

```
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	History
DELETE operation: Old Salary was 1500.				
1 row(s) deleted.				