• Create a table emp with fields eno, ename, department, salary

• Insert atleast 5 records into given table.

=> Table created:

CREATE TABLE emp1 (

eno NUMBER,

ename VARCHAR2(50),

department VARCHAR2(50),

salary NUMBER

);

=> Inserted Values:

INSERT INTO emp1 VALUES (1,'Alice','IT',50000);

INSERT INTO emp1 VALUES (2, 'Bob', 'HR', 6000);

INSERT INTO emp1 VALUES (3, 'Charlie', 'IT', 7000);

INSERT INTO emp1 VALUES (4, 'David', 'Finance', 8000);

INSERT INTO emp1 VALUES (5, 'Eve', 'IT', 9000);

1)1. Write a database trigger store the deleted data of EMP table in EMPDEL

table.

CREATE TABLE EMPDEL (

eno NUMBER,

ename VARCHAR2(50),

department VARCHAR2(50),

salary NUMBER

);

CREATE OR REPLACE TRIGGER EMPDEL

BEFORE DELETE ON emp1

FOR EACH ROW

begin

INSERT INTO EMPDEL (eno,ename,department,salary) VALUES (:OLD.eno,:OLD.ename,:OLD.department,:OLD.salary);

end;

/

Test:

SQL> select \* from emp1;

ENO ENAME

---------- --------------------------------------------------

DEPARTMENT SALARY

-------------------------------------------------- ----------

2 Bob

HR 6000

3 Charlie

IT 7000

4 David

Finance 8000

ENO ENAME

---------- --------------------------------------------------

DEPARTMENT SALARY

-------------------------------------------------- ----------

5 Eve

IT 9000

SQL> delete from emp1 where eno=2;

1 row deleted.

SQL> select \* from empdel;

ENO ENAME

---------- --------------------------------------------------

DEPARTMENT SALARY

-------------------------------------------------- ----------

2 Bob

HR 6000

2)2. Write a database trigger to update salary in employee table and it shows

salary difference before updating data.

CREATE OR REPLACE TRIGGER emp\_salary\_trigger

BEFORE UPDATE OF salary ON emp1

FOR EACH ROW

DECLARE

salary\_diff NUMBER;

BEGIN

salary\_diff := :NEW.salary - :OLD.salary;

DBMS\_OUTPUT.PUT\_LINE('Salary difference: ' || salary\_diff);

END;

/

test:

INSERT INTO emp1 VALUES (1,'Alice','IT',50000);

SQL> UPDATE emp SET salary = 5500 WHERE eno = 1; -- Assuming eno 1 is one of the existing rows

2

SQL> UPDATE emp1 SET salary = 5500 WHERE eno = 1;

Salary difference: -44500

1 row updated.

3) Write a trigger to store eid,department,salary to new table before

inserting a new record into emp table.

CREATE TABLE new\_emp (

eno NUMBER,

department VARCHAR2(50),

salary NUMBER

);

CREATE OR REPLACE TRIGGER emp\_insert\_trigger

BEFORE INSERT ON emp1

FOR EACH ROW

BEGIN

INSERT INTO new\_emp (eno, department, salary)

VALUES (:NEW.eno, :NEW.department, :NEW.salary);

END;

/

test/check:

INSERT INTO emp1 (eno, ename, department, salary) VALUES (101, 'John Doe', 'IT', 5000);

SELECT \* FROM new\_emp WHERE eno = 101;

4. Write a trigger to store employee details into new table who is working

in ‘IT’ department.

CREATE OR REPLACE TRIGGER emp\_it\_trigger

BEFORE INSERT ON emp1

FOR EACH ROW

BEGIN

IF :NEW.department = 'IT' THEN

INSERT INTO new\_emp (eno, department, salary)

VALUES (:NEW.eno, :NEW.department, :NEW.salary);

END IF;

END;

INSERT INTO emp1 VALUES (102,'Ashish','IT',9000);

INSERT INTO emp1 VALUES (103,'Harshil','IT',19000);

SQL> select \* from new\_emp;

ENO DEPARTMENT SALARY

---------- -------------------------------------------------- ----------

101 IT 5000

102 IT 9000

102 IT 9000

SQL> INSERT INTO emp1 VALUES (103,'Harshil','IT',19000);

1 row created.

SQL> select \* from new\_emp;

ENO DEPARTMENT SALARY

---------- -------------------------------------------------- ----------

101 IT 5000

102 IT 9000

102 IT 9000

103 IT 19000

103 IT 19000

5. Write a trigger which will store eno,old\_salary,new\_salary into

new\_emp table before update the salary in emp table.

CREATE OR REPLACE TRIGGER emp\_salary\_update\_trigger

BEFORE UPDATE OF salary ON emp1

FOR EACH ROW

BEGIN

INSERT INTO new\_emp (eno, department, salary)

VALUES (:OLD.eno, :OLD.department, :OLD.salary);

INSERT INTO new\_emp (eno, department, salary)

VALUES (:OLD.eno, :OLD.department, :NEW.salary);

END;

/

UPDATE emp1 SET salary = 7000 WHERE eno = 4;

SQL> select \* from new\_emp;

ENO DEPARTMENT SALARY

---------- -------------------------------------------------- ----------

101 IT 5000

102 IT 9000

102 IT 9000

103 IT 19000

103 IT 19000

1 IT 7000

1 IT 7000

4 Finance 8000

4 Finance 7000