**Ex. No: 7 Date: 08 – 09 - 2022**

**Experiment 7**

Implicit Cursors

**Consider the following schema of a database:**

**employees** (employeeId, employeeName, employeeCity)

**Tables:**

**employees**

|  |  |  |
| --- | --- | --- |
| employeeId | employeeName | employeeCity |
| 1 | XXX | Chennai |
| 2 | XYZ | Mumbai |
| 3 | YYY | Calcutta |

**Write SQL queries to**

* Delete record having employeeId = 2, and if successful, insert values (2, 'ZZZ', 'Delhi').
* Do previous query but instead of inserting values, update employeeCity = Chandigarh where employeeId = 1.
* Update employeeCity = Gurgaon where employeeId = 2, and if successful, delete record having employeeId = 1.
* Do first query, but instead of inserting values, just show number of employees deleted.

**Queries:**

* Delete record having employeeId = 2, and if successful, insert values (2, 'ZZZ', 'Delhi').

CREATE TABLE tempory\_employee AS SELECT \* FROM employees;

DECLARE

employeeNo NUMBER(4) := 2;

BEGIN

DELETE FROM tempory\_employee WHERE employeeId = employeeNo ;

IF SQL%FOUND THEN -- delete succeeded

INSERT INTO tempory\_employee (employeeId,employeeName,employeeCity) VALUES (2, 'ZZZ', 'Delhi');

END IF;

END;

/

* Do previous question but instead of inserting values, update employeeCity = Chandigarh where employeeId = 1.

CREATE TABLE tempory\_employee1 AS SELECT \* FROM employees;

DECLARE

employeeNo NUMBER(4) := 2;

BEGIN

DELETE FROM tempory\_employee WHERE employeeId = employeeNo ;

IF SQL%FOUND THEN -- delete succeeded

UPDATE employees SET employeeCity = 'Chandigarh' WHERE employeeId = 1;

END IF;

END;

/

* Update employeeCity = Gurgaon where employeeId = 2, and if successful, delete record having employeeId = 1.

CREATE TABLE tempory\_employee2 AS SELECT \* FROM employees;

DECLARE

employeeNo NUMBER(4) := 2;

BEGIN

UPDATE tempory\_employee2 SET employeeCity = 'Gurgaon' WHERE employeeId = employeeNo;

IF SQL%FOUND THEN -- update succeeded

DELETE FROM tempory\_employee2 WHERE employeeId = 1 ; -- Then delete a specific row

END IF;

END;

/

* Do Query 1, but instead of inserting values, just show number of employees deleted.

CREATE TABLE tempory\_employee3 AS SELECT \* FROM employees;

DECLARE employeeNo NUMBER(4) := 2;

BEGIN

DELETE FROM tempory\_employee3 WHERE employeeId = employeeNo ;

DBMS\_OUTPUT.PUT\_LINE('Number of employees deleted: ' || TO\_CHAR(SQL%ROWCOUNT));

END;

**Code:**

SQL> create table employees (employeeid number(10) not null, employeename varchar2(50) not null, employeecity varchar2(50), primary key (employeeid));

Table created.

SQL> desc employees;

Name Null? Type

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EMPLOYEEID NOT NULL NUMBER(10)

EMPLOYEENAME NOT NULL VARCHAR2(50)

EMPLOYEECITY VARCHAR2(50)

SQL> insert into employees values(1,'XXX','Chennai');

1 row created.

SQL> insert into employees values(2,'XYZ','Mumbai');

1 row created.

SQL> insert into employees values(3,'YYY','Calcutta');

1 row created.

SQL> select \* from employees;

EMPLOYEEID EMPLOYEENAME

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EMPLOYEECITY

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

1 XXX

Chennai

2 XYZ

Mumbai

3 YYY

Calcutta

SQL> set linesize 1500;

SQL> select \* from employees;

EMPLOYEEID EMPLOYEENAME EMPLOYEECITY

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1 XXX Chennai

2 XYZ Mumbai

3 YYY Calcutta

SQL> set serveroutput on;

SQL> @ C:\Users\2162014\DBMS\temp\_emp.sql;

Table created.

PL/SQL procedure successfully completed.

SQL> select \* from tempory\_employee;

EMPLOYEEID EMPLOYEENAME EMPLOYEECITY

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1 XXX Chennai

3 YYY Calcutta

2 ZZZ Delhi

SQL> @ C:\Users\2162014\DBMS\temp\_emp1.sql;

Table created.

PL/SQL procedure successfully completed.

SQL> select \* from tempory\_employee1;

EMPLOYEEID EMPLOYEENAME EMPLOYEECITY

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1 XXX Chennai

2 XYZ Mumbai

3 YYY Calcutta

SQL> @ C:\Users\2162014\DBMS\temp\_emp2.sql;

Table created.

PL/SQL procedure successfully completed.

SQL> select \* from tempory\_employee2;

EMPLOYEEID EMPLOYEENAME EMPLOYEECITY

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2 XYZ Gurgaon

3 YYY Calcutta

SQL> @ C:\Users\2162014\DBMS\temp\_emp3.sql;

Table created.

PL/SQL procedure successfully completed.

SQL> select \* from tempory\_employee3;

EMPLOYEEID EMPLOYEENAME EMPLOYEECITY

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