EXP 12

CURSORS

AIM: To execute CURSORS in sql

1) COMMANDS EXECUTION:

CREATE TABLE TUTOR

CREATE TABLE TUTOR(
CODE INT NOT NULL,
SUBJECT VARCHAR(15) NOT NULL,
TEACHER VARCHAR(15),
REVIEWS VARCHAR (10) NOT NULL,
PRIMARY KEY (CODE)
);

```
SQL> CREATE TABLE TUTOR1(
  2  CODE INT NOT NULL,
  3  SUBJECT VARCHAR(15) NOT NULL,
  4  TEACHER VARCHAR(15),
  5  REVIEWS VARCHAR (10) NOT NULL,
  6  PRIMARY KEY (CODE)
  7  );

Table created.
```

2) INSERT VALUES INTO TABLE

INSERT INTO TUTOR
(CODE,SUBJECT,TEACHER,REVIEWS)

VALUES (1, 'Automation', 'Mukul', 'five stars');

INSERT INTO TUTOR
(CODE,SUBJECT,TEACHER,REVIEWS)

VALUES (4, 'PLSQL', 'Anand', 'four stars');

INSERT INTO TUTOR
(CODE,SUBJECT,TEACHER,REVIEWS)

VALUES (2, 'Performance', 'Arvind', 'four stars');

```
SQL> INSERT INTO TUTOR1 (CODE,SUBJECT,TEACHER,REVIEWS)
  2  VALUES (1, 'Automation', 'Mukul', 'five stars');

1 row created.

SQL> INSERT INTO TUTOR1 (CODE,SUBJECT,TEACHER,REVIEWS)
  2  VALUES (4, 'PLSQL', 'Anand', 'four stars');

1 row created.

SQL> INSERT INTO TUTOR1 (CODE,SUBJECT,TEACHER,REVIEWS)
  2  VALUES (2, 'Performance', 'Arvind', 'four stars');

1 row created.

SQL> SELECT * FROM TUTOR1;

      CODE SUBJECT         TEACHER         REVIEWS
---------- --------------- --------------- ----------
         1 Automation      Mukul           five stars
         4 PLSQL           Anand           four stars
         2 Performance     Arvind          four stars
```

3) CODE IMPLEMENTATION WITH THE IMPLICIT CURSOR:

```
DECLARE
   total_count number(30);
BEGIN

   --updating a row
   UPDATE TUTOR
   SET TEACHER = 'Zen' where CODE = 1;

   -- result in boolean, true returned if no rows affected
   IF sql%notfound THEN
      dbms_output.put_line('no subjects fetched');

      -- result in boolean, true returned if any rows affected
      ELSIF sql%found THEN

      -- count the number of rows affected rows affected
      total_count := sql%rowcount;
      dbms_output.put_line( total_count || ' teacher name updated ');
   END IF;
END;
/
```

```
SQL> DECLARE
  2      total_count number(30);
  3  BEGIN
  4
  5      --updating a row
  6      UPDATE TUTOR1
  7      SET TEACHER = 'Zen' where CODE = 1;
  8
  9      -- result in boolean, true returned if no rows affected
 10      IF sql%notfound THEN
 11          dbms_output.put_line('no subjects fetched');
 12
 13
 14          -- result in boolean, true returned if any rows affected
 15          ELSIF sql%found THEN
 16
 17          -- count the number of rows affected rows affected
 18          total_count := sql%rowcount;
 19          dbms_output.put_line( total_count || ' teacher name updated ');
 20      END IF;
 21  END;
 22  /
1 teacher name updated

PL/SQL procedure successfully completed.
```

OUTPUT:

SELECT * FROM TUTOR;

```
PL/SQL procedure successfully completed.

SQL> SELECT * FROM TUTOR;

      CODE SUBJECT         TEACHER         REVIEWS
---------- --------------- --------------- ----------
         1 Automation      Zen             five stars
         4 PLSQL           Anand           four stars
         2 Performance     Arvind          four stars
```

4)CODE IMPLEMENTATION WITH EXPLICIT CURSOR:

```
DECLARE
   -- cursor declaration
CURSOR t_tutorials is
SELECT code, subject, teacher FROM Tutor;

t_code Tutor.code%type;
t_subject Tutor.subject%type;
t_teacher Tutor.teacher%type;
BEGIN

   -- opening a cursor
   OPEN t_tutorials;
LOOP

    -- fetching values from cursor
    FETCH t_tutorials into t_code, t_subject, t_teacher;
    EXIT WHEN t_tutorials%notfound;

    -- printing in console
    dbms_output.put_line('Code is: ' || t_code || ' ' || 'Subject is: '
```

|| t_subject || ' Teacher is: ' || t_teacher);

END LOOP;

CLOSE t_tutorials;

END;

/

```
SQL> DECLARE
  2     -- cursor declaration
  3  CURSOR t_tutorials is
  4  SELECT code, subject, teacher FROM Tutor1;
  5  t_code Tutor1.code%type;
  6  t_subject Tutor1.subject%type;
  7  t_teacher Tutor1.teacher%type;
  8  BEGIN
  9
 10     -- opening a cursor
 11    OPEN t_tutorials;
 12  LOOP
 13
 14      -- fetching values from cursor
 15      FETCH t_tutorials into t_code, t_subject, t_teacher;
 16      EXIT WHEN t_tutorials%notfound;
 17
 18      -- printing in console
 19      dbms_output.put_line('Code is: ' || t_code || ' ' || 'Subject is: ' || t_subject || ' Teacher is: ' || t_teacher);
 20  END LOOP;
 21  CLOSE t_tutorials;
 22  END;
 23  /
Code is: 1 Subject is: Automation Teacher is: Zen
Code is: 4 Subject is: PLSQL Teacher is: Anand
Code is: 2 Subject is: Performance Teacher is: Arvind

PL/SQL procedure successfully completed.
```

<u>RESULT:</u> Cursors were implemented successfully

CHITRALEKHA.CH

RA1911003010387