

Assignment No-5

Title → Cursors (All types Implicit, explicit, Cursor FOR Loop, parameterized Cursor)

Write a PL/SQL block of code using parameterized Cursor, that will merge the data available in the newly created table N_RollCall with the data available in the table O_RollCall. If the data in the first table already exist in the second table then that data should be skipped.

Frame the separate problem statement from for writing PL/SQL block to implement all types of Cursors inline with above statement. The problem statement should clearly state the requirements.

Objective :-

- To Develop program for Cursor

Outcomes :-

- Student will be able to learn the concept of Cursor
- Student will be able to develop functions for all types of Cursors.

Requirements :-

Software :- MySQL

Theory ->

A cursor is a pointer to this context area. PL/SQL controls the context area through a cursor. A cursor holds the rows returned by a SQL Statement. The set of rows the cursor holds is referred to as the active set.

There are two types of cursors -

- Implicit Cursors

- Explicit Cursors

Implicit Cursor

→ Implicit Cursors are automatically created by Oracle whenever an SQL statement is executed, when there is no explicit cursor for the statement. Programmers cannot control the implicit cursors and the information in it.

Explicit Cursors

→ Explicit Cursors are programmer-defined cursors for gaining more control over the context area. An explicit cursor should be defined in the declaration section of the PL/SQL Block. It is created on a SELECT statement which returns more than one row.

MySQL cursor

To handle a result set inside a stored procedure, you use a cursor. A cursor allows you to iterate a set of rows returned by a query and process each row accordingly. MySQL cursor is read-only, non-scrollable and asensitive.

- 1) Read Only → you cannot update data in the underlying table through the cursor.
- 2) Non-Scrollable → You can only fetch rows in the order determined by the SELECT statement. You cannot fetch rows in the reversed order.
- 3) Asensitive → There are two kinds of cursors: asensitive cursor and insensitive cursor. An asensitive cursor points to the actual data whereas an insensitive cursor uses a temporary copy of the data. However, any changes that made to the data from other connections will affect the data that is being used by an asensitive cursor, therefore, it is safer if you don't update the data that is being used by an asensitive cursor. MySQL cursor is asensitive.

Working with MySQL cursor

- 1) DECLARE cursor-name CURSOR FOR SELECT Statement
- 2) OPEN cursor-name;
- 3) FETCH cursor-name INTO variable list;
- 4) CLOSE cursor-name;

Cursors with Parameters

DECLARE

declare variables

create a cursor with parameter;

BEGIN

OPEN cursor;

FETCH cursor;

process the rows;

CLOSE cursor;

END;

Conclusion :-

In this practical we had implemented functions for various cursor. And developed the program for the parameterized cursor.