DBS Labsheet-10

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PL-SQL Triggers

A *trigger* is a procedural SQL code that is automatically invoked by the RDBMS upon the occurrence of a data manipulation event.

- 1.A trigger is invoked before or after a data row is inserted, deleted or updated.
- 2.A trigger is associated with a database table.
- 3. Each table may have one or more triggers.
- 4. Triggers can be used to enforce constraints
- 5. Triggers can be used to insert/update records and to call stored procedures.
- 6.Used for auditing purpose (creating logs)
- 7. Generation of derived values.

We work on creating triggers.

We discuss what are Row-level and Table-level Triggers with examples.

PL-SQL Cursor

A cursor is a special construct in PL/SQL used to hold data rows returned by SQL query.

It can be seen as a reserved area of memory in which the output of a query can be stored.

It held in the reserved area of DBMS at server.

Cursor commands:

Open

Fetch

Close

Attributes:

```
%rowcount // returns number of rows fetched so far
%found // returns true if last fetch returned a row otherwise False
%notfound // returns true if last fetch did not return a row
%isopen // returns true if cursor is open
```

Example 1:

// Procedure to print book id and price in the format, using cursors "For the book with id: XXX the price is:###"