Assignment - VIII

Title :- Database Trigger.

Problem statement :-
Write a database trigger on student table. The system should keep track of the records that are being updated or deleted. The old value of updated or deleted records should be added in Alumini table
Student (Roll no, Name, Date of Admission, branch, percent, status).

Objective :-
- Understand the concept of data-base triggers
- Understand the mysql commands.

S/w & H/w requirement :-
mysql, 64 bit OS fedora.

Outcomes :-
The student will be able to implement & apply types of database trigger.

Theory :-

A trigger defines an action the database should taken when some database-related event (such as inserts, updates, deletes) occur Triggers are similar to procedures in that they are named PL/SQL blocks.

A procedure is executed explicitly from another block via a procedure call with passing arguments while a trigger is executed implicitly whenever the trigger event happens.

Types of triggers :-

There are two types of triggers in oracle • including row level trigger & statement level trigger.

Row level triggers for data related activities. Row level triggers execute once for each row in a translation Row level triggers are most common type of triggers. They are often used in data auditing applications Row level trigger is identified by the for each row clase in the create trigger command.

Statement level triggers for transaction related activities.

Statement level triggers for execute once for each transaction. for example, If a single transaction inserted 500 rows into the customer table then statement level trigger on that table would only be executed once.

statement level triggers are the default type of triggers created & are identified by omitting for each row.

Before & After triggers,

Since triggers occur because of events, they may be set to occur immediate -ly before or after those events, The events that execute triggers are database transactions. Triggers can be executed immediately Before or after the statements. Insert, Update, Deletes,

After row level triggers are frequently used in auditing applications, since they do not fire until the row has been modified.

valid trigger types (possible combination for triggers) statement (Insert, delet update) , Timing (Before, After) , level (row-level , statement-level)

Syntax :-

create or replace triggers update major stats.
After Insert or delete or update on studen

Testcase :-

Operation	Actual O/P	Expected O/P	Result
1) Update students set name = 'john' where id = 2.	student exist ~~student~~ status updated	student exist status updated	Success
2) Delete from students where id = 2.	student deleted Student entered in Alumini	Student deleted Student entered in Alumini	Success

conclusion :- In this assignment we learnt to implement & apply row level triggers, as well as statement level triggers.