A **trigger** is a **named database object** that is **associated with a table** and that **activates when a particular event occur for the table**.

A trigger contains SQL statements or a set of SQL statements which is stored to be activated or fired when an event associating with a database table occurs. The event can be any event including INSERT, UPDATE and DELETE.

Sometimes a trigger is referred as a special kind of stored procedure. The difference between a trigger and a stored procedure is that a trigger is activated or called when an event happens in a database table. Trigger is automatically called upon when the particular event is going to occur in the associated table, a stored procedure must be called manually just like a usual method calling in programming.

1. SQL trigger is very useful when you use it to audit the changes of data in a database table.

Triggers can be executed before data is inserted or updated into the database

PostgreSQL provides two main types of triggers: row and statement-level triggers. The differences between the two kinds are how many times the trigger is invoked and at what time.

For example, if you issue an UPDATE statement that affects 20 rows, the row-level trigger will be invoked 20 times, while the statement level trigger will be invoked 1 time.

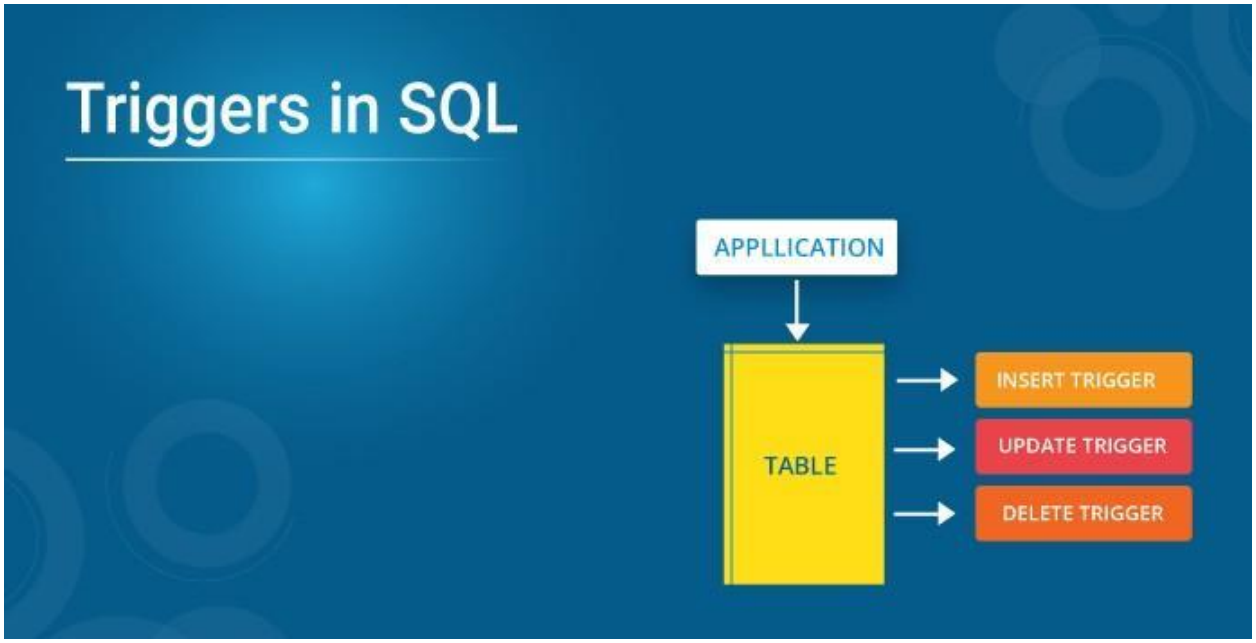
For example, OLD and NEW represent the states of the row in the table before or after the triggering event.

PostgreSQL also provides other local variables preceded by TG_ such as TG_WHEN, and TG_TABLE_NAME.

Once you define a trigger function, you can bind it to one or more trigger events such as INSERT, UPDATE, and DELETE.

Points to be remember to create trigger

- A trigger must be associated with a specific table. Without a table trigger does not exist so you have to specify the table name after the ON keyword.
- You can write the logic between BEGIN and END block of the trigger.
- MySQL gives you OLD and NEW keyword to help you write trigger more efficient. The OLD keyword refers to the existing row before you update data and the NEW keyword refers to the new row after you update data.


Triggers in SQL
APPLLICATION
TABLE
INSERT TRIGGER
UPDATE TRIGGER
DELETE TRIGGER