TRIGGERS

Trigger is actually a coding block, written in SQL. Trigger is related to some specific event which may happen in database. If that event takes place, then the trigger performs some specific action for which the trigger is designed. Trigger is designed by the user but executes automatically. We can design multiple triggers for multiple events. Triggers are for maintain security, integrity but also helps users to access the database.

Normally Trigger is designed to execute, when DML statements like insert, update, delete type commands are performed.

Like in a school management database, school's fee is 5000. If a person enters the amount less then or greater then this amount, then a trigger will execute and write the value to "5000" automatically.

Basic parts of a trigger:

A trigger has three basic parts

1. A triggering event or statement
2. A trigger restriction
3. A trigger action

Syntax of a trigger

```
create trigger Trigger_name
(before | after)
[insert | update | delete]      (triggering event or statement)
on [table_name]
[for each row]
[trigger_body]                  (trigger restriction)
```

In the final or updated view of table the result will be shown.

Here:
create trigger: code to create trigger
Trigger_name: name of the trigger.

[insert | update | delete]: on which operation you want to run trigger.

(before | after): before the operation or after the operation

on [table_name]: the name of table on you want to put a trigger.

[for each row]: after make any type of changes in any row present in any column the trigger will execute.

[trigger_body]: what operation or action want to perform, write in allowed code language.

Advantages of Triggers

1. Triggers can maintain the integrity of the data.
2. To perform a similar operation multiple time in a table we can write a trigger for that action and after that the operation will execute itself.

Disadvantages of Triggers

1. It is very tough to make changes or to stop the trigger. Most of user even can't understand why the trigger is executed.
2. If we can't understand its mechanism then we can't stop it from execution.
3. A trigger is executed every time when any operation is performed in a table. This can increase the burden of a database.

Types of triggers:

1. Row Triggers: Apply on rows
2. Statement Triggers: Apply on statement
3. Before Triggers: Before the operation or event
4. AFTER Triggers: after the operation or event
5. Cascading triggers: a trigger in a trigger