

Triggers

- Trigger is a special type of stored procedures that is automatically executed when an event occurs in a specific database server

Type of triggers

- There are two type of triggers
- 1 / DDL trigger : the ddl triggers are fired in response to DDL(data defination language) command event that start with Create ,Alter and Drop

Expamle

```
create trigger saftey
on database
for
create_table,alter_table,drop_table
as
Print
'you can not create ,drop and alter table
in this database'
rollback;
```

Type of triggers

- 2/ DML triggers is a special type of stored procedure that automatically takes effect when a data manipulation language (DML) event takes place that affects the table or view defined in the trigger. DML events include INSERT, UPDATE, or DELETE statements

Example

```
create trigger stopAddOrder
on Order
for
insert,update,delete
as
print'you can not insert,update and
delete this table Orders'
rollback;
```

Type of triggers

- There are two type of DML triggers
- 1 –AFTER trigger >> An after trigger runs after the corresponding insert, update, or delete changes are applied to the table.
- Example

```
create trigger DetectInsert
on Orders
after insert
as
begin
INSERT INTO [notifications]
([notification] ,orderDate)
VALUES ( 'Someone Add Order ' ,GETDATE() )
end
```

Type of triggers

- 2- INSTEAD of trigger>>describe how to perform insert, update, and delete operations against complex views
- Example

```
CREATE trigger RecordAsAbsense
on ATTENDENCE
INSTEAD OF insert
as
BEGIN
INSERT INTO ABSENCE
SELECT INSERTED.FirstName, INSERTED.attendTime
FROM INSERTED
WHERE CAST(attendTime as time) > '08:00:00'

INSERT INTO ATTENDENCE
SELECT INSERTED.FirstName, INSERTED.attendTime
FROM INSERTED
WHERE CAST(attendTime as time) <= '08:00:00'
END
```