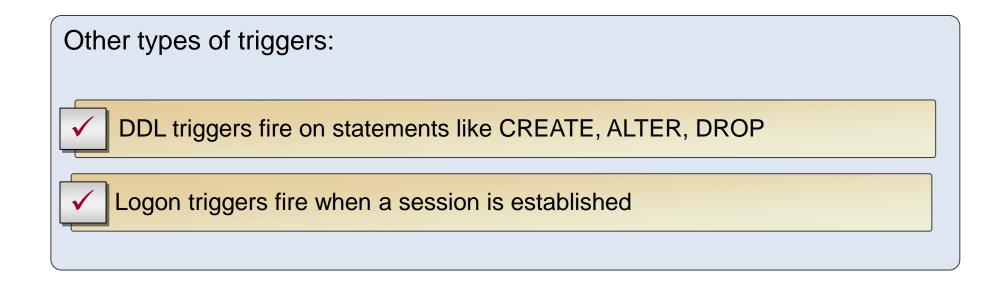
# SQL Trigger Basics

# What are DML Triggers?

Triggers are special stored procedures that execute when events occur. DML triggers fire on INSERT, UPDATE, DELETE.



### AFTER Triggers vs. INSTEAD OF Triggers

#### AFTER triggers

- Fire after the event that they relate to
- Are treated as part of the same transaction as the statement that triggered them
- Can roll back the statement that triggered them (and any transaction that statement was part of)

#### INSTEAD OF triggers

- Allow executing alternate code unlike a BEFORE trigger in other database engines
- Are often used to create updatable views with more than one base table
- Both can be implemented in managed code or T-SQL

## AFTER INSERT Triggers

- INSERT statement is executed
- AFTER INSERT trigger then fires
- Support auditing

```
CREATE TRIGGER TR_Opportunity_Insert
ON Sales.Opportunity
AFTER INSERT AS
BEGIN
SET NOCOUNT ON;
INSERT INTO Sales.OpportunityAudit
(OpportunityID, ActionPerformed, ActionOccurredAt)
SELECT i.OpportunityID,

'I',
SYSDATETIME()
FROM inserted AS i;
END;
```