View - virtual table based on the result set of sql statement(kinda proxy to original db) Types of views:

- Indexed - view that has been materialized. You index a view by creating a unique clustered index on it (clustered $\approx sorted, only one per table can exist (therebyunique)).Partitione$ $joins horizontally partida ta from a set of member tables$

- System - expos catalog metadata

index - kinda lookup table

CREATE VIEW ¡view name¿ WITH SCHEMABINDING AS SELECT ¡cols¿ FROM ¡t¿ GO

CREATE UNIQUE CLUSTERED INDEX ¡view name¿ – or is it ¡index name¿ ON ¡view name¿(¡index key columns¿)

partitioned view: CREATE VIEW ¡view name¿ AS SELECT ¡cols¿ FROM ¡t1¿ UNION ALL SELECT ¡cols¿ FROM ¡t2¿ UNION ALL SELECT ¡cols¿ FROM ¡t3¿

Select db -¿ views -¿ System views

¡CREATE — ALTER¿ VIEW ¡v¿ AS SELECT ¡cols¿ FROM ¡t¿ WHERE ¡cond¿;

You can update underlying tables using view, but only one table at once, computed columns cant be updated(kinda obvious)

UPDATE ¡v¿ SET ¡col = val¿ WHERE ¡cond¿;

INSERT INTO ¡view¿ (¡cols¿) VALUES (¡vals¿);

Trigger - special procedure that executes in responce to certain action on table(e.g. insert delete update etc) DML triger types:

- AFTER - after the action (INSERT UPDATE MERGE or DELETE)

- INSTEAD OF - override the action

CREATE TRIGGER ¡trigger¿ ON ¡table¿ ¡AFTER — INSTEAD OF¿ ¡INSERT — UPDATE — DELETE¿ AS ¡transact sql statement¿ GO

ALTER TRIGGER ¡trigger¿ ON ¡table¿ ¡AFTER — INSTEAD OF¿ ¡INSERT — UPDATE — DELETE¿ AS ¡statement¿

CREATE TRIGGER ¡tr¿ ON ¡DATABASE — ALL SERVER¿ ¡FOR — AFTER¿ ¡EVENT TYPE — EVENT GROUP¿ AS ¡statement¿

event types:

- $\text{CREATE}_{V}IEWALTER_{V}IEW$

- $\text{DROP}_{V}IEWCREATE_{T}ABLE$

- $\text{DROP}_{D}ATABASE\ldots$

create trigger statement must be first in batch and can only apply to one table. a trigger is created only in current db. truncate table doesn't trigger delete trigger. instead of delete/update triggers cant be defined on tables with cascade foreign keys.

Grouping Ranking functions

GROUP BY GROUP BY GROUPING SETS (¡sets¿) GROUP BY ROLLUP (¡set¿) GROUP BY CUBE (¡set¿)

ROLLUP (1, 2, 3) is same as GROUPING SETS (1 1, 2 1, 2, 3)

CUBE (1, 2, 3) is same as GROUPING SETS (1 2 3 1, 2 1, 3 2, 3 1, 2, 3)

XML datatypes $\mathrm{sp}_x ml_p reparedocument sp_x ml_r emovedocument$