Microsoft SQL Server 2019
Design & Develop

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منطق سه ارزشی

- **NULL**
  - It's not a value
  - It's a mark for missing value

- **The Possible values of a predicate in SQL are:**
  - TRUE
  - FALSE
  - UNKNOWN

- **The Logical value of these expressions is UNKNOWN:**
  - NULL > 179
  - NULL = NULL
  - X + NULL > Y

(3) GROUP BY

- Generate groups
  - ## Based on GROUP BY clause

- One row per each group
  - ## unique combination of values

- After GROUP BY
  - Expressions specified in GROUP BY clause
  - AGG Function
    - MAX()
    - MIN()
    - SUM()
    - AVG()
    - COUNT()

(4) HAVING

- Filters the Groups

(5-2) DISTINCT

- Remove duplicate rows

(6) ORDER BY

- Orders the rows

- Options:
    - ASC(Default Option) / DESC
    - Column
    - Expression
    - Alias
    - Column Position

- TOP
  - Filter Rows

- TOP Options:
  - (n) rows
  - (n) PERCENCT

- OFFSET-FETCH
  - Skip Rows
  - Filter Rows

SET

	Object	Temporary
Physical	Table	Temporary Table
		Table Variable
		Table Data Type
Virtual = Table Expression = Named Query	View	Common Table Expression (CTE)
	Inline Table Valued Function (Inline TVF)	Derived Table (Set Sub Query)

Table Expression

- All Table Expressions must have name
  - Table Expressions names must be unique

- All Columns must have name
  - Column names must be unique

- ORDER BY Clause is not acceptable
  - Unless using TOP/ OFFSET-FETCH

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