

Microsoft SQL Server 2019

Design & Develop



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Senior DW/ ETL/ BI Architect

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- **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:**

- | | | |
|------------------|-----------------|--------------|
| • $NULL > 179$ | $NULL < 179$ | $NULL = 179$ |
| • $NULL = NULL$ | | |
| • $X + NULL > Y$ | $1 + NULL > 10$ | |

(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,
 - Composite (Tie Breaker)

(7) TOP

(7) OFFSET-FETCH



- TOP
 - Filter Rows
- TOP Options:
 - (n) rows
 - (n) PERCENT
- OFFSET-FETCH
 - ORDER BY
 - Skip Rows
 - Filter Rows

تمرین



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- نام ۱۰ کالای برتر سال ۲۰۱۲
 - نام ۱۰ مشتری کم خرید فصل بهار

• منطق سه ارزشی چیست؟