

# Microsoft SQL Server 2019

## Design & Develop



---

Masoud Mirzakhani  
**Senior DW/ ETL/ BI Architect**

# Microsoft SQL Server 2019 Design & Develop



---

Masoud Mirzakhani  
**Senior DW/ ETL/ BI Architect**

- **Master of Science in Information Technology**
- **Bachelor of Science in Information Technology**
  
- [md.mirzakhani@gmail.com](mailto:md.mirzakhani@gmail.com)
- [@MasoudMirzakhani](#)
- [linkedin.com/in/masoudmirzakhani](https://www.linkedin.com/in/masoudmirzakhani)



# CASE



- CASE is an Expression

- Syntax 1:

CASE

WHEN *condition1* THEN *result1*

WHEN *condition2* THEN *result2*

...

WHEN *conditionN* THEN *resultN*

ELSE *resultElse*

END;

# CASE



- Syntax 2:  
CASE input\_expression  
    WHEN expression1 THEN result1  
    WHEN expression2 THEN result2  
    WHEN expressionN THEN resultN  
    ELSE *result*  
END

# PIVOT



- 
- Rotate data from a state of rows to a state of columns
  - Phases:
    - Grouping
      - Based on columns not participated in PIVOT
    - Spreading attribute IN (attr1, attr2, ...)
    - Aggregating

# UNPIVOT



- 
- UNION
  - CROSS JOIN
  - UNPIVOT