

Microsoft SQL Server 2019

Design & Develop



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Sub Query



-
- Scalar
 - 1 Column, 1 Row
 - Multivalued
 - 1 Column, n Rows
 - Set
 - n Columns, n Rows

SELECT

(Expression)

FROM

(Set)

(Condition)

WHERE

(Condition)

GROUP BY

(Expression)

HAVING

(Condition)

ORDER BY

(Expression)

SELECT Statement



Expression	Scalar	
Condition	Scalar	Equation
	Multi Valued	IN, NOT IN
	Set	EXISTS, NOT EXISTS
Set	Set	

Sub Query



-
- Self Contained
 - Sub Query is independent.
 - Correlated
 - Sub Query is dependent on Main Query

Sub Query



	Scalar	Multi Valued	Set
Self Contained	Percent of Total	Person who are Employee Person who are not Employee	Sales: Year, Q1,Q2,Q3,Q4
Correlated	Sales: Year, Q1,Q2,Q3,Q4		Person who are Employee Person who are not Employee Top Two Customer for each year

Inter SELECT Operator

-
- UNION (+ DISTINCT)
 - UNION ALL
 - EXCEPT (+ DISTINCT)
 - **EXCEPT ALL**
 - INTERSECT (+ DISTINCT)
 - **INTERSECT ALL**

Inter SELECT Operator

- **Same Column Quantity**
- **Last SELECT Statement allows ORDER BY**
 - Sort Final Result
- **First SELECT Statement defines Column Names**
- **Same Column have same Data Type**
 - Implicit CONVERT
 - Base on Data Type Priority